

1959



FLORIDA STATE BOARD OF HEALTH

1959

ANNUAL REPORT

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Annual Report

State Board of Health

State of Florida

1959

The following statistical reports will be published separately:

SUPPLEMENT I — FLORIDA VITAL STATISTICS, 1959

SUPPLEMENT II — FLORIDA MORBIDITY STATISTICS, 1959

WILSON T. SOWDER, M.D.

STATE HEALTH OFFICER

JACKSONVILLE, FLORIDA

The Honorable JOHN D. MILTON, M.D., President
Florida State Board Of Health,
Miami, Florida

Dear Dr. Milton:

I herewith submit the annual report of the Florida
State Board of Health for the year ending December 31,
1959.

Sincerely yours,

WILSON T. SOWDER, M.D.
State Health Officer

May 1, 1960
Jacksonville, Florida

His Excellency, LEROY COLLINS
Governor of Florida
Tallahassee, Florida

Sir:

I beg to hand you herewith a report of the Florida
State Board of Health for the period January 1, 1959, to
December 31, 1959, inclusive.

Respectfully submitted,

JOHN D. MILTON, M.D.
President

May 1, 1960
Miami, Florida

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Miami, Florida

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Miami, Florida

Members of the
FLORIDA STATE BOARD OF HEALTH

CHARLES J. COLLINS, M.D., *President*

Orlando

T. M. CUMBIE, Ph.G.

Quincy

F. P. MEYER, SR., D.D.S.

St. Petersburg

SULLIVAN G. BEDELL, M.D.

Jacksonville

JOHN D. MILTON, M.D.

Miami

OFFICIAL STAFF FLORIDA STATE BOARD OF HEALTH

December 31, 1959

DIRECTORS

State Health OfficerWilson T. Sowder, M.D., M.P.H.
Assistant State Health OfficerAlbert V. Hardy, M.D., Dr.P.H.
Assistant State Health OfficerClarence M. Sharp, M.D.
Personnel OfficerElizabeth Reed, R.N., B.S., Acting

Bureau of Finance and AccountsFred B. Ragland, B.S.
Assistant DirectorPaul R. Tidwell, B.B.A.
Purchasing AgentG. Wilson Baltzell, B.S.

Bureau of Vital StatisticsEverett H. Williams, Jr., M.S., Hyg.

Bureau of Local Health ServicesWade N. Stephens, M.D., M.P.H.
Assistant DirectorHubert V. King, M.D.
Division of Public Health NursingRuth E. Mettinger, R.N.
Division of SanitationA. W. Morrison, Jr.
Nutrition ServicesMary B. Deaver, M.S.

Bureau of Preventable DiseasesJames O. Bond, M.D., M.P.H.
Division of Radiological and
Occupational HealthEdwin G. Williams, M.D.
Division of Tuberculosis ControlDwight Wharton, M.D.
Division of EpidemiologyRobert E. Markush, M.D., M.P.H.,
Acting
Division of Veterinary Public HealthJames E. Scatterday, D.V.M., M.P.H.

Bureau of Special Health ServicesLorenzo L. Parks, M.D., M.P.H.
Division of Hospitals and Nursing
HomesJohn L. Enyart, M.D.
Division of Chronic Diseases.....Lorenzo L. Parks, M.D., M.P.H.

Bureau of LaboratoriesNathan J. Schneider, Ph. D.
Miami Regional LaboratoryWarren R. Hoffert, Ph. D.
Orlando Regional LaboratoryMax T. Trainer, M.S.
Pensacola Regional LaboratoryEmory D. Lord, Jr., B.S.
Tallahassee Regional LaboratoryRobert A. Grover, M.S.
Tampa Regional LaboratoryH. D. Venters, B.S.
West Palm Beach Regional LaboratoryLorraine Carson

Bureau of Maternal and Child HealthSimon D. Doff, M.D., M.P.H.
Assistant DirectorEdward L. Flemming, Ed. D.

Bureau of Mental HealthWayne Yeager, M.D., M.P.H.

Bureau of Dental HealthFloyd H. DeCamp, D.D.S.

Bureau of EntomologyJohn A. Mulrennan, Sr., B.S.A.

Bureau of Sanitary EngineeringDavid B. Lee, M.S. Eng.
Assistant DirectorSidney A. Berkowitz, M.S. Eng.
Division of Water SupplyJohn B. Miller, B.S., M.P.H.
Division of Waste WaterRalph H. Baker, Jr., M.S.S.E.

Bureau of Narcotics.....Frank S. Castor, Ph.G.

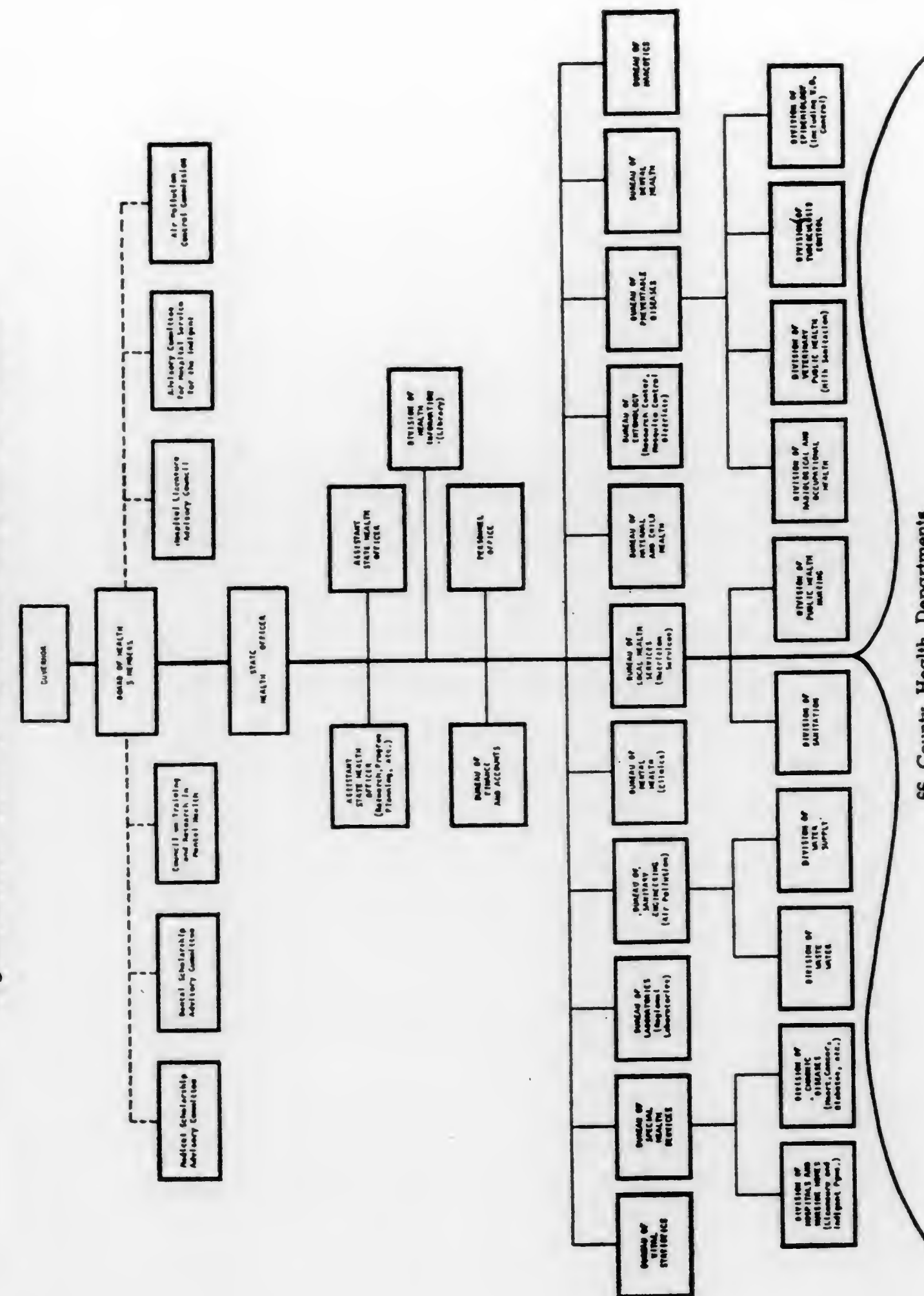
Division of Health Information.....Elizabeth Reed, R.N., B.S.

DIRECTORS OF COUNTY HEALTH DEPARTMENTS

(As of December 31, 1959)

Alachua.....	Edward G. Byrne, M.D., M.P.H.
Bay.....	A. F. Ullman, M.D.
Brevard.....	Albert O. Rossi, M.D.
Broward.....	Paul W. Hughes, M.D., M.P.H.
Dade.....	T. E. Cato, M.D., M.P.H.
Duval.....	Thomas E. Morgan, M.D., M.P.H.
Escambia.....	J. C. McSween, M.D.
Hillsborough.....	Frank V. Chappell, M.D., M.P.H.
Jefferson.....	Thomas S. Englar, M.D., M.P.H.
Lake.....	J. Basil Hall, M.D., M.P.H.
Leon.....	Joseph M. Bistowish, M.D., M.P.H.
Manatee.....	Frederick K. Allen, M.D.
Marion.....	Patrick H. Smith, M.D.
Monroe.....	James L. Wardlaw, Jr., M.D., M.P.H.
Okaloosa.....	B. R. Provost, M.D.
Orange.....	J. Harland Paul, M.D., M.P.H.
Palm Beach.....	C. L. Brumback, M.D., M.P.H.
Pinellas.....	William C. Ballard, M.D., M.P.H.
Polk.....	Chester L. Nayfield, M.D., M.P.H.
Santa Rosa.....	Walter F. Sidwell, M.D.
Sarasota.....	William L. Wright, M.D., M.P.H.
Seminole.....	Wade N. Stephens, M.D., M.P.H., (Acting)
Volusia.....	D. V. Galloway, M.D., M.P.H.
Baker-Nassau.....	James C. Loranger, M.D.
Calhoun-Jackson.....	Terry Bird, M.D., M.P.H.
Collier-Lee.....	Joseph W. Lawrence, M.D.
Flagler-Putnam.....	James R. Sayers, M.D.
Gadsden-Liberty.....	B. D. Blackwelder, M.D., M.P.H.
Madison-Taylor.....	Clyde L. Brothers, M.D.
Osceola-Indian River.....	C. C. Flood, M.D., M.P.H.
Pasco-Sumter.....	Charles E. Gill, M.D., M.P.H.
Bradford-Clay-Union.....	A. Y. Covington, M.D., M.P.H.
Charlotte-DeSoto-Hardee.....	James K. Cooke, M.D.
Citrus-Hernando-Levy.....	Harold F. Bonifield, M.D., M.P.H.
Columbia-Gilchrist-Hamilton.....	Arthur R. Moler, M.D.
Franklin-Gulf-Wakulla.....	Henry I. Langston, M.D., M.P.H.
Glades-Hendry-Highlands.....	William F. Hill, Jr., M.D.
Holmes-Walton-Washington.....	McKinley Cheshire, Jr., M.D.
Martin-Okeechobee-St. Lucie.....	Neill D. Miller, M.D.
Suwannee-Dixie-Lafayette.....	Wade N. Stephens, M.D., M.P.H., (Acting)

Organizational Chart of the Florida State Board of Health



66 County Health Departments

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GENERAL SUMMARY

W. T. SOWDER, M.D., M.P.H., State Health Officer
A. V. HARDY, M.D., Dr. P.H., Assistant State Health Officer
C. M. SHARP, M.D., Assistant State Health Officer

GENERAL

The year under review was one of continuing progress in established directions. There were no crises such as that caused by the emergency needs of migratory laborers; there was no new building to be dedicated; and no major new programs were initiated. The chief problem of the year has been attempting to meet expanding needs with little or no budgetary or personnel increases.

Recruitment was a less troublesome problem late in 1959 than earlier in the year or in the preceding year. At the end of 1959, all health officer positions in the counties, except two, were filled. There were few vacancies for other personnel.

A second Assistant State Health Officer, C. M. Sharp, M.D., was designated and transferred to this new position in September. His major responsibilities are in providing administrative assistance to the State Health Officer. The Division of Industrial Hygiene was reorganized and became the Division of Radiological and Occupational Health. In line with this change in emphasis, a health physicist and supporting personnel were employed. A radiologist was assigned to the Division from the U. S. Public Health Service. Responsibility for air pollution previously in this division was transferred to the Bureau of Sanitary Engineering.

Legislative enactment called for joint action with the State Department of Public Welfare in the provision of medical services to the recipients of public assistance. This was recommended to enable the state to benefit from matching federal funds. Despite the rigid federal requirements, a joint program was evolved and initiated as of October 1. In the remaining months of the year problems in the operation of a program designed to satisfy federal requirements were in evidence. However, with the better understanding of the difference between the state-county program and the federal-state matching program, the objections to the necessary changes were less in evidence. Gradually the benefit derived from additional funds obtained through federal matching were outweighing the troublesome administrative features of this joint activity.

Within the limitation imposed by restricted budget, there were gratifying advances. The Cancer Control Program attained a full time director and some additional support for the Tumor Clinics. The mental health worker program continued to expand and to become better established in the various County Health Departments served. Epidemiology was greatly strengthened through the assignment by the USPHS of 2 medical officers. The preceptorship program in the dental field is beginning to more adequately meet the extensive public health dental needs in the state. Nursing home licensure has been strengthened through the assignment to this program of a full time worker trained in hospital administration. The difficult-to-design accident prevention program

began to take effective shape. These are illustrative of the varying modifications which have added strength to established programs.

There is a continuing awareness of handicaps imposed by less than adequate facilities. In Jacksonville 2 major bureaus are housed in rented quarters. There is great need for the final wing of the new headquarters building. Two of the regional laboratories are housed in very old and unsatisfactory quarters which cannot be renovated at any reasonable cost. There is urgent need to proceed with construction of new quarters financed in part through the sale of present facilities and through federal matching funds. The air pollution, entomological and stream pollution studies in Polk County are housed in temporary quarters. It appears obvious that there will be continuing need for laboratory facilities in this rapidly expanding region. Plans are underway to obtain a transfer (from the State Department of Agriculture to the State Board of Health) of a plot of land immediately adjacent to the Polk County Health Department building in Winter Haven. Final plans for this building should materialize within the year. The above are high priority requirements for the improvement of physical facilities for public health in Florida.

During the year the State Health Officer was elected President of the Association of State and Territorial Health Officers. He continued as a member of the Executive Board and the Governing Council of the American Public Health Association. Also the Assistant State Health Officer, A. V. Hardy, M.D., spent 6 weeks during August and September as a consultant to the World Health Organization in Geneva and Yugoslavia. This was a continuation and extension of his previous work with that organization in planning for the study and control of the acute diarrheal diseases.

ACTIVITIES OF THE BOARD

WILSON T. SOWDER, M.D., M.P.H.
Secretary

The year was marked by the resignation of the President, Charles J. Collins, M.D., of Orlando, shortly before the end of his term in November. To replace him the Governor appointed W. S. Horn, D.O., of Palmetto, Florida. F. P. Meyer, D.D.S., of St. Petersburg was reappointed for an additional 4 year term beginning in November 1959. The Vice President, Mr. T. M. Cumbie, served as Acting President during the remainder of the calendar year.

Five meetings were held and the dates, places and the major items of business transacted were as follows:

February 10—Jacksonville

1. Adopted a policy to encourage consultation to national and international agencies by allowing the same number of days of leave, and under the same conditions, as is allowed for military service. This policy is applied, however, only to persons not receiving military leave during the year.

2. Adopted a policy to encourage the employment of older persons in the field of public health.
3. Voted to continue the use of health cards after hearing a recommendation to this effect by C. M. Sharp, M.D., director of the Bureau of Preventable Diseases.
4. Reviewed various proposals for submission by the State Board of Health to the Legislature and approved and endorsed various items of proposed legislation. The Board specifically endorsed special legislation for expanding the dental public health program and for establishing home nursing services throughout the state.
5. Approved and endorsed the report of the Governor's Citizens Medical Committee on Health.
6. Reelected Charles J. Collins, M.D., as President and Mr. T. M. Cumbie as Vice President.

May 3—Bal Harbour, Miami Beach

1. Adopted revision of Chapter XIX, Wholesale and Retail Distribution of Frozen Foods.
2. Adopted revision Chapter XXV, Labor Camps. This was done because the previous code did not cover migratory labor camps. These changes were intended to serve a temporary purpose until the passage of an act pending in the Legislature on migratory labor camps.
3. Approved the 10 applicants for medical scholarships as recommended by the Medical Scholarship Committee.
4. Approved the 18 applicants for public health scholarships recommended by Dr. Sowder and by a staff committee.
5. Approved the appointment of Edwin Williams, M.D., as director of the Division of Industrial Hygiene to be effective about August first to replace the incumbent, James Reid, M.D., resigned.
6. Endorsed a bill proposed by Dr. Sowder for an appropriation of \$15,000 to begin the purchase of the block across Julia Street from the State Board of Health.
7. Abolished the Division of Venereal Disease Control and placed venereal disease control activities in the newly created Division of Epidemiology in the Bureau of Preventable Diseases.

July 19—Fernandina Beach

1. Heard reports and discussed laws passed and appropriations made by the Legislature.
2. Voted to authorize the distribution of state funds to County Health Departments in the same way as the previous year.

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3. Approved the transfer of the Air Pollution Control Program from the Division of Industrial Hygiene in the Bureau of Preventable Diseases to the Bureau of Sanitary Engineering.
4. Approved revisions of Chapter XXIV of the Sanitary Code relating to School Sanitation.
5. Studied proposed revisions of regulations for the licensing of hospitals. Action postponed.
6. Approved the appointment of members of the Advisory Committee on Hospital Service for the Indigent.
7. Approved the appointment of Dwight Wharton, M.D., as director of the Division of Tuberculosis Control.
8. Approved the appointment of James O. Bond, M.D., as director of the Bureau of Preventable Diseases effective September first, replacing C. M. Sharp, M.D., appointed as Assistant State Health Officer. Approval for Dr Sharp's appointment as Assistant State Health Officer given by Board in 1958 to be effective when practical. Dr. Sharp became Assistant State Health Officer effective July first.
9. Approved the transfer of General Data Processing Services from the Bureau of Vital Statistics to the State Health Officer's office.

August 9—Jacksonville

1. Met with the Advisory Committee on Hospital Services for the Indigent, the Director of the State Department of Public Welfare, and representatives of the Florida Medical Association and Florida Hospital Association for the purpose of considering a proposed contract between the State Board of Health and State Department of Public Welfare for hospitalization of public welfare recipients. Upon the recommendation of the Advisory Committee, the Board approved the contract with the State Department of Public Welfare.
2. Adopted revision of the regulations for the licensing of hospitals.
3. Upon the recommendation of the Dental Scholarship Committee (the State Board of Dental Examiners) approved the awarding of 11 scholarships for the study of dentistry.
4. Authorized the State Health Officer to proceed with the purchase of 2 lots across Julia Street from the State Board of Health with funds provided by the Legislature.
5. Approved a plan for the place of practice of recipients of dental scholarships.
6. Approved the appointment of J. E. Fulghum, M.D., as director of the Cancer Control Program in the Bureau of Special Health Services.

GENERAL SUMMARY 5

November 1—Orlando

1. Changed the name of the Division of Industrial Hygiene to Division of Radiological and Occupational Health.
2. Approved the appointment of Mr. Ralph Baker as director of the Division of Waste Water in the Bureau of Sanitary Engineering.
3. Reviewed and discussed the last report of the State Auditor on the financial operations of the State Board of Health.
4. Postponed action to set up out-patient clinics as provided by amendment to indigent hospitalization law because of the shortage of funds.
5. Approved revision of Chapter XXV, Camps. This revision was made necessary by passage of a specific law for the regulation of migratory labor camp housing and sanitation by the last Legislature.
6. Authorized the State Health Officer to make contracts from time to time with the Florida Medical Foundation for services rendered.
7. Approved a plan for the distribution of funds to County Health Departments for the remainder of the fiscal year.
8. Adopted revisions of the regulations for nursing home licensure.
9. Approved the study of a plan for group insurance for State Board of Health employees and appointed a Committee on Insurance to study the problem. The committee membership to consist of the members of the Executive Committee of the Florida Public Health Association plus Mr. Robert Carter.

PUBLIC HEALTH RESEARCH

A. V. HARDY, M.D., Dr.P.H.
Assistant State Health Officer and
Coordinator of Research

In this Annual Report, the record of research performed in the various bureaus and divisions is included as a part of the report of each bureau and division. As in the past there has been a particularly active research program in the Bureau of Entomology, notably at the Entomological Research Center in Vero Beach. The Bureau of Preventable Diseases markedly expanded its study program late in the year. In cooperation with the Communicable Disease Center, the Division of Epidemiology undertook a survey of the immunization status for the various infectious diseases in Hillsborough County. It also was actively involved in the investigation of encephalitis which occurred in unusual numbers in the late months of 1959 in Pinellas County. All findings in this study have been reviewed in association with out-of-state consul-

tants. It was agreed that the clinical, epidemiological and laboratory features pointed to diagnosis of the St. Louis type of encephalitis. This expansion of studies of the Bureau of Preventable Diseases was made possible through the assignment by the U. S. Public Health Service of 2 epidemiologists. Also early in the year a previous employee of the Bureau of Laboratories, who had just completed his training in medicine, joined the bureau to undertake the field studies of pulmonary infections due to atypical acid-fast bacilli.

In a similar way one can point to a continuation of studies sponsored through the Bureaus of Maternal and Child Health, Mental Health and Laboratories, all adequately described in the reports of these bureaus.

In the County Health Departments the studies of health problems of the aged have moved forward under the energetic leadership of Howard Carter, M.D., in Pinellas County. Irving Webber, Ph.D., who contributed as a consultant from the beginning of the studies, was appointed as a full time staff member in August. In Hillsborough County the Coordinated Community Mental Illness Program has developed in a satisfying manner.

An activity of great interest was planned in the late months of 1959. A field trial of oral polio vaccine in Dade County was developed as a cooperative project by the County Health Department, the County Medical Society and the University of Miami Medical School. Under the leadership of T. E. Cato, M.D. (director of the County Health Department) and with the joint direction of Eugene Flipse, M.D., and George Erickson, M.D., the plans for this major undertaking took final form in the late weeks of the year. It is anticipated that the conduct of this study will prove to be one of the major research efforts in public health in Florida in 1960.

There has been a continuing awareness of the need for research designed to improve the effectiveness of public health programs. To this end the Kellogg Foundation provided support for studies in Public Health Administration. Under this 5 year grant a Health Officer IV, a health program analyst and a secretary were employed, together with the part-time assistance of a social scientist and needed consultants. Work under this grant was fully activated in September. There has been gratifying progress since that time in developing procedures for a critical review and analysis of all programs of bureaus and divisions. By its early productivity, this study promises to be one of the most significant undertaken by the State Board of Health.

Of the new support for research obtained during the year the approval of one research training grant was of particular interest. This will make it possible to provide opportunities for suitably qualified physicians and social scientists to obtain research training in connection with selected studies in Florida. This grant should gradually add to the research capacity in the state and in surrounding areas.

Research grants in effect in 1959 were in excess of \$300,000. Additional grants approved during the year totaled approximately \$200,000 of which the largest item was for the field trial of oral polio vaccine. Funds for this joint study are being administered through the University of Miami. It is hoped and anticipated that grant funds available for research will continue to increase.

Articles by staff members:

Hardy, A. V. Research in Our Health Departments. J. Florida M. Ass. 45: 1148-1151, April 1959.

Hardy, A. V. Diarrheal Diseases of Infants and Children. Bull. World Health Org. 21: 309-319, 1959.

Hardy, A. V. The Responsibility of Public Health Agencies for the Health of the Aged. University of Florida Press Society and the Health of Older People, 9: 131-141, March 1959.

SCHOLARSHIPS FOR PROFESSIONAL EDUCATION

The 1959 session of the Legislature created scholarships for the study of medicine, dentistry and the several disciplines concerned with mental health. Each program requires that the scholarship be repaid by a period of compensatory practice in an area that is in need of the scholarship recipient's professional training.

Forty thousand dollars a year is appropriated for scholarships for the study of medicine. The scholarships are awarded by the State Board of Health upon the recommendation of a 7-man advisory committee authorized by statute. The deans of Florida's 2 medical schools are ex-officio members. The remaining 5 members are designated by the President of the Florida Medical Association. The 2 ex-officio members were Dean George T. Harrell of the University of Florida and Assistant Dean John C. Finerty of the University of Miami. The five physicians designated by the Florida Medical Association were Richard C. Clay, Miami; James T. Cook, Jr., Marianna; T. Z. Cason, Jacksonville; Melvin M. Simmons, Chairman, Sarasota and Homer L. Pearson, Jr., Miami.

Forty thousand dollars is appropriated annually for the award of scholarships for the study of dentistry. The statute provides that the State Board of Health award dental scholarships upon the recommendation of the State Board of Dental Examiners. The following dentists served on that Board in 1959: Frank T. Scott, Jacksonville; D. J. Zimmerman, Ft. Myers; Robert Thoburn, Daytona Beach; Rupert H. Gillespie, West Palm Beach; F. F. Farver, Chairman, Miami Beach; J. M. Pepper, Vice-Chairman, Pensacola; and R. P. Taylor, Jr., Secretary-Treasurer.

Upon the recommendation of the Florida Council on Training and Research in Mental Health, scholarships or stipends are awarded by the State Board of Health each year for the training of residents in psychiatry, interns in clinical psychology, psychiatric nurses and psychiatric social workers.

Through the Federal Social Security Act of 1935, the State Board of Health receives federal funds which are used to provide stipends to the employees of the State Board of Health and its affiliated County Health Departments for specialized professional training. These stipends are awarded by the State Board of Health to its career employees who evidence potential for growth and service in specialized areas of public health.

Persons receiving scholarships in 1959 were:

MEDICAL

Scholarships Awarded in 1959:

Robert Allen Boudet.....Gainesville	William Michael McGaw.....Miami
Gordon Thomas Couch.....Pensacola	Howard Wayne Ramsey.....Palatka
James Edward Davis.....Madison	John Wayne Ross.....Tallahassee
Francis Thomas Greene.....Tallahassee	David Oliver Westmark.....Pensacola
Everett Norwood	Wilbur Williams, Jr.....St. Petersburg
McCormick Jacksonville	Lawrence Delano Kelley.....Jacksonville

Continuing Scholarships awarded prior to 1959:

Awarded 1956:	Awarded 1957:	Awarded 1958:
William Henry Hubbard	Robert Edwin Allen, Jr.	Jarrett Charles Black
Glen Mayo	Ernest Austin	Robert Elliott Blakey
Luther C. McRae	David Merle Bleech	William Edwin Braun
Charles T. Ozaki	Hoyt Horne	James Wilson Bridges
Arthur Warren Sweat	Edwin Keenan House, Jr.	Karl George Gerlach
	John Franklin Mason, Jr.	Ed R. McDonough
	Ronald Joseph Scheib	Troy E. Overstreet
	Leonidas Martin Turner, Jr.	Lawrence E. Newman
	Joseph Albert Walton, Jr.	Ralph E. Reed
	Richard Burke Welch	Earl Taylor
		Raymond Charles Walker
		Robert Paul C. Whittier
		George A. Williams
		Lawrence Donald Porter

DENTAL

Scholarships Awarded in 1959:

George W. Alexander.....Jacksonville	Henry Normand
Parris Brown.....Pensacola	Hudson St. Petersburg
Robert A. Brown.....DeFuniak Springs	Paul V. Ladd.....Miami
Gene Watkins Eng.....Miami	Daniel G. Noland.....Tampa
Robert G. Fountain.....Crestview	Thomas M. Scott.....Live Oak
	Marlin Drant Walker.....Tampa

Continuing Scholarships awarded prior to 1959:

Awarded 1956:	Awarded 1957:	Awarded 1958:
William Gage Boyd, Jr.	Richard Kingsley Ames	Alvin Bayer, III
Henry James Johnson	Jay Brenner	Wilbur Knox Collins
George E. Carver	Robert Hardin Carter	James Emmett Mongoven
Thomas Marshall Darden	William Howard Filler	Rudolph Robinson
Joe Holland Dowdy	Robert B. Hayling	Raymond William Gage, II

Wade Burke Hammer
Harry Gruen
David Campbell McCoy
Alfred J. Phillips
Richard Rafael Souviron
Raymond Edwin Rogers
Donald Spence

Peter B. Mills
Bennie Thompson
Harold Thomas Wilson
Lester C. Young
Robert Wylly Butler

Stephen H. Mills
Oran Lloyd Turner, Jr.
James E. Thompson
Parnick Auston Williams
Harold D. Jordon

MENTAL HEALTH

RESIDENTS IN PSYCHIATRY

Herbert C. Anderson, M.D.....Miami	Stanley S. NeeDell, M.D.....Miami
William H. Geiger, M. D.....Miami	Wilford M. Provo, M.D.....Miami
Ernest O. Herreid, Jr. M.D.....Miami	Martin Rosenthal, M. D.....Miami
Evan Katz, M.D.....Miami	Ronald A. Shellow, M.D.....Miami
Lyle B. Kunz, M.D.....Miami	

CLINICAL PSYCHOLOGY

Frances P. Brown.....Ft. Lauderdale	Nathan W. Perry, Jr.....St. Petersburg
Charles E. Buchanan.....Gainesville	Thomas D. Prutsman.....Ft. Lauderdale
Laurence T. Carroll, Jr.....Miami	Eve Lyn Weeks.....Coral Gables
Donald B. Clark.....Ft. Lauderdale	Betty Whitney.....Hallandale
William G. Murdy.....Gainesville	

PSYCHIATRIC NURSING

Mary Helen Livingston.....Tallahassee
Jamie Cook Watnee.....Coral Gables
Wynelle Mims Scherer.....St. Augustine

PSYCHIATRIC SOCIAL WORK

First Year

Edwin C. Bowers.....Tallahassee
Annabel M. Brantley.....Key West
Ellen May Ellis.....Lakeland
Robert R. Furlough.....Tallahassee
Allyn D. Gibson.....Lakeland
Murray L. Kaufman.....Tampa
William A. Masterson.....Jacksonville
William A. Proctor.....Ft. Lauderdale
Roy Taine.....Leesburg

Second Year

Humbert V. Arcamonte
.....Miami Springs
Thomas H. Broome, Jr.....Marianna
J. Pomeroy Carter.....Live Oak
Stanley D. Davenport.....Hawthorne
Patsy Nell Hirt.....Tallahassee
Eleanor F. Moore.....Miami
Richard S. Sheffer.....Clearwater

William A. Masterson dropped out as of 12/1/59
Temple Hess picked up beginning 12/15/59

PUBLIC HEALTH PERSONNEL

Cecilia J. Link.....Public Health Nurse.....Broward County
Fern Kingham.....Public Health Nurse.....Polk County
Nan Richardson.....Public Health Nurse.....Alachua County
Wilma P. Dickey.....Public Health Nurse.....Madison County
Florine A. Marshall.....Public Health Nurse.....Escambia County
Joseph K. Kastor.....Sanitarian .....Pinellas County
Charles I. Wollins.....Sanitarian .....Dade County
Charles G. Jordan.....Sanitary Engineer.....Dade County
Marvin L. Wicker.....Sanitary Engineer.....Bureau of Sanitary Engineering
Melvin P. Reid, Ph.D.....Clinical Psychologist.....Bureau of Mental Health
Banna I. Rodriguez.....Mental Health Worker.....Palm Beach County

PERSONNEL OFFICE

ELIZABETH REED, B. S.
Acting Personnel Officer

During the year many things occurred that had ramifications which effected and affected the operations of the Personnel Office. Some of these are: changes in environment; changes in office personnel; the continual increase in work load; and the legislative spending philosophy for the 1959-61 biennium.

The environment of the Personnel Office has changed considerably since the beginning of 1959, when the Personnel Office was located in small and overcrowded quarters. Then in February 1959, the office was moved to its present location, with more commodious quarters.

Although there was added only one new part-time clerk to the staff, there was a 58 per cent turnover in personnel, which is reflected as follows: a stenographer was replaced in February; a clerk-typist was replaced in January and again in September; a personnel technician was replaced in July. There were 3 acting Personnel Officers during the year.

The work load continued to increase. The Personnel Office processed the employment papers of 493 new employees, 367 terminations (full and part-time employees), 1576 salary advancements; 294 salary adjustments were given in lieu of salary advancements; 27 merit increases were approved; and, 21 employees that were on a fee basis were placed on the regular payroll in October. Social Security payments were revised upward, necessitating considerable paper work.

One hundred seventy-two new classified positions were added to the Table of Organization, in addition to 109 positions that were reclassified to a higher level. Only 7 positions were temporarily down-graded.

Twelve employees successfully completed the academic requirements leading to the Master of Public Health degree; while one obtained a Master of Arts in Education, and one completed the year's program of study in public health nursing.

On July 1, 1959, the Legislative Appropriation Act went into effect, which provided that all state agencies were limited to the positions that were in the Legislative Budget; and that each employee was eligible for a 5 per cent increase only in salary over their June 1959 rate (for the position that he was in), for the biennium July 1, 1959, through June 30, 1961.

TABLE 1

MERIT SYSTEM STATUS OF STATE AND LOCAL HEALTH UNIT
PERSONNEL AS OF DECEMBER 31, 1958 AND 1959

Status	1958	1959	Per cent change
Permanent and Probationary	1457	1656	+13.65
Provisional	64	37	-42.18
Temporary	0	6	
Emergency	26	15	-42.31
Exempt and Part-Time	293	273	- 6.83
Total	1840	1987	+ 7.99

GENERAL SUMMARY 11

	Totals	Physicians	Sanitary Engineers	Sanitarians	Public Health Nurses	Professional Laboratory Workers	Administrative and Fiscal	Other Professional	Technical	Clerical	All Others	Part-Time (All)
Grand Total	586	20	29	14	22	48	26	81	61	191	86	7
Administration - SHO	18	3					4	1		9		1
Personnel	13						3	3		9	3	1
Data Processing	15						1	4		8	8	2
Total	46	3					8	5		26	1	
Dental Health	12						5		1	7	27	
Finance and Accounts	39						7			16	10	
Purchasing & Property	51						1	5	1	6	4	
Total	102						12	1	16	39	41	
Health Information	51								1	7	3	
Jacksonville	20								1	2	2	
Miami	7								1	1	1	
Orlando	8								2	1	2	
Pensacola	6								2	1	1	
Tallahassee	19								2	1	1	
Tampa	6								2	1	1	
West Palm Beach	117								34	15	29	
Total	177	2					1	1	5	49	2	
Bureau of Nutrition	6									1		
Public Health Nursing	14									2		
Sanitation	8									10		
Total	28									13		
Maternal and Child Health	30	2								6		
Mental Health	11	1								4		
Narcotics	13	2								4		
Bureau of Radiological and Occupational Health	8		1							2		
Tuberculosis Control	21	1								8		
Venerical Disease Control	11	1								2		
Epidemiology	2									2		
Veterinary Public Health	5									2		
Total	67	4	1	2	1	1				19		
Sanitary Engineering	64		27							19		
Bureau and Hospitals and Nursing Homes	15									7		
Chronic Diseases	10									4		
Total	79		1							24		
Entomology	25									13		
Vital Statistics	43									39		

TABLE 2
DISTRIBUTION OF PERSONNEL—STATE BOARD OF HEALTH
(OTHER THAN COUNTY HEALTH DEPARTMENTS)
DECEMBER 31, 1959

TABLE 3
DISTRIBUTION OF PERSONNEL IN COUNTY
HEALTH DEPARTMENTS—DECEMBER 31, 1959

COUNTY	Totals	Physicians	Sanitary Engineers	Sanitarians	Public Health Nurses	Professional Laboratory Workers	Administration and Fiscal	Other Professional	Technical	Clerical	All Other	Part-Time **
Total.....	1,401	54	11	270	475	2	3	76	21	272	112	105
Alachua.....	41	1		8	11			5		6	5	5
Baker.....	4			1	1			1		1		1
Bay.....	16	1		4	5			2		2	1	1
Bradford.....	5			1	2					1		1
Brevard.....	31	1		6	8			2	2	7	5	5
Broward.....	54	1	2	10	17			5		13	3	1
Calhoun.....	4			1	1					1		1
Charlotte.....	5	1*		1	2			1		1		1
Citrus.....	5			1	2					1		1
Clay.....	8	1*		2	3					1		1
Collier.....	10			2	2					3		3
Columbia.....	7	1*		2	2					1	1	1
Dade.....	227	5	3	49	101		1	7	1	42	9	9
DeSoto.....	5			1	2			1		1		1
Dixie.....	4			1	1					1		1
Duval.....	36	1		6	11			7		5	4	1
Escambia.....	52	1		8	14				1	15	7	6
Flagler.....	4			1	1					1		1
Franklin.....	5	1*		1	1					1		1
Gadsden.....	14	1*		3	6					2	1	1
Gilchrist.....	2			1	1					1		1
Glades.....	1									1		1
Gulf.....	5			1	2					1		1
Hamilton.....	4			1	1					1		1
Hardee.....	5			1	2					1		1
Hendry.....	6			1	1					1		1
Hernando.....	2			1	1					1		1
Highlands.....	8	1*		2	2			1		1		1
Hillsborough.....	142	5	1	28	45		1	8	3	27	18	6
Holmes.....	5			1	2					1		1
Indian River.....	8	1*		1	5					1		1
Jackson.....	14	1*		2	5			1		2	1	2
Jefferson.....	8	1		1	3					2	1	1
Lafayette.....	4			1	1					1	1	1
Lake.....	17	1		3	7					2	2	1
Lee.....	13	1*		3	5			1		2	4	1
Leon.....	31	2		5	9			5		6	4	1
Levy.....	6	1*		1	2					1	1	1
Liberty.....	2			1	1					1		1
Madison.....	8	1*		1	2					2	1	2
Manatee.....	20	1		5	5			2		4	1	1
Marion.....	14	1		3	5			1		2	1	1
Martin.....	5			2	2					1		1
Monroe.....	16	1		2	6					3	3	1
Nassau.....	11	1*		2	3					2	3	1
Okaloosa.....	13	1		2	4					2		4
Okeechobee.....	3			1	1					1	1	1
Orange.....	58	2		8	16			3	6	14	5	4
Osceola.....	5			2	1					1		1
Palm Beach.....	69	2	1	12	20			3	2	12	7	10
Pasco.....	5	1*		1	2					1		1
Pinellas.....	121	3	1	23	46	1	1	7	1	23	10	5
Polk.....	71	2	1	14	23			3	1	15	6	6
Putnam.....	11	1*		2	4					1		3
St. Lucie.....	15	1*		5	2			2		2	1	2
Santa Rosa.....	9	1		2	3					1		1
Sarasota.....	34	1	1	6	12			2		9	2	1
Seminole.....	10	1		3	3			1		2		1
Sumter.....	4			1	1					1		1
Suwannee.....	7			1	3					1		1
Taylor.....	4			1	1					1		1
Union.....	3			1	1					1		1
Volusia.....	53	2	1	9	16	1		4	1	7	7	4
Wakulla.....	2			1	1					1		1
Walton.....	7	1*		1	2					1	1	1
Washington.....	5			1	2					1		1

* County Health Officer for two or more County Health Units. See roster of County Health Officers.
 ** Includes all part-time employees in County Health Departments.

LEGEND

(See Table 3)

Chart Title	Class Titles
Physicians	Health Officer I thru V (Including Psychiatrists)
Sanitary Engineers	Sanitary Engineer I thru VI
Sanitarians	Sanitarian I thru Director of Sanitation
Public Health Nurses	Public Health Nurse I thru V
Professional Laboratory Workers	Bioanalyst I thru V Chemist I thru III
Administrative, Fiscal, and Professional	Accountant I thru V Administrative Assistant I thru IV Administrative Services Director Attorney I thru IV Buyer, Purchasing Agent I & II Fiscal Accountant I thru IV Health Program Analyst Hospital Consultant Personnel Officer I & II Personnel Technician I & II Public Health Laboratory Director Public Health Statistician I & II Procedures Director Vital Statistics Director
Other Professional	Biologist I thru V Clinical Psychologist I thru IV Dental Hygienist Dental Preceptorship Entomologist I thru V Health Educator I thru IV Librarian Medical Social Worker Mental Health Worker I & II Narcotics Inspector I thru IV Nutritionist I thru III Psychiatric Nursing Consultant Psychiatric Social Worker I thru IV Public Health Dentist I thru III Public Health Physicist Research Social Scientist Social Scientist Social Work Supervisor Veterinarian I thru III

DIVISION OF HEALTH INFORMATION

ELIZABETH REED, R.N., B.S.
Director

Several new positions for health educators opened up in County Health Departments. There are now 9 budgeted positions for health educators on the local level. It is felt that this indicates a greater appreciation of the role that they must play in public health programs of the future.

More time was spent with bureau and division directors in endeavoring to determine the place of health education in old as well as new programs. Accident prevention and radiological health are two examples.

As usual there was preoccupation with media and materials designed to inform the general public. Assistance was given to many County Health Departments and other bureaus and divisions in complementing their efforts in this direction.

There is a continuous interest in the 3 day orientation programs for public health and related personnel. A backlog of applicants are always waiting for the next one. Two were scheduled in 1959.

TOOLS

A large portion of the budget is spent on *Florida Health Notes*. This publication goes to approximately 15,000 persons each month, except July and August. It seems to continue in popularity since requests to be put on the mailing list are received daily. Subjects covered in 1959 were sewage problems, mental health, housing, research, viruses, frozen foods, community nursing service and health careers. The services of a consulting layout artist have improved its appearance.

The exhibits consultant held over 50 planning conferences and assisted with displays at 20 fairs and conventions. He also turned out over 300 other pieces of work such as charts, maps, TV props, etc. Many of the State Board of Health's standard exhibits were lost in a flood in May which invaded the consultant's workshop. He assisted in layouts, cartoons, illustrations and attended a 2 weeks audio-visual course at the Communicable Disease Center in Atlanta.

The press, radio and TV maintained interest in public health with 76 releases originating at the State Board of Health. Many inquiries are received from editors, popular subjects being cardiovascular disease, cancer, mental health, radiological safety, accident prevention and environmental sanitation.

The flood of requests for pamphlets never ceases though emphasis is constantly placed on their wise use in smaller quantity. Approximately

375,000 pamphlets were distributed, the most popular being those on nutrition, communicable diseases and weight control. There was an increase in requests originating in schools.

AUDIO-VISUAL AIDS LIBRARY

There is a slow but steady increase in the use of all audio-visual aids with a beginning interest in more use of tapes, slides and filmstrips. The number of aids circulated were 5,803, an increase of almost 4 per cent over the previous year. Approximately 586,000 persons saw these aids, which does not include estimated audiences who saw 6 films telecast and heard 20 radio transcriptions. There were also TV spot announcements and 35 mm X-ray trailers circulated.

Requests were received from all 67 counties . . . A new electronically operated film inspection machine was purchased. A new booking order form was devised. Both of these have resulted in more efficient operation . . . 2 projects with which the library assisted were the circulation of tape recordings of the 1959 Heart Seminar and 35 mm slide sets on the care of premature infants. Both have had wide use . . . Many requests are made of the staff to assist in the instruction of trainees in using projection equipment and in the planning for TV programs . . . Projection equipment was loaned 255 times to SBH personnel.

Because of the heavy circulation load, there has not been sufficient time to evaluate the subject coverage (which is spotty), to study the new equipment that is being offered, to devise a better method of previewing new aids and to investigate still projection which could be a promising new development.

LIBRARY

BARBARA BECKNER, B.A., M.S.L.S.
Librarian

The appearance of the library has been greatly improved by the purchase of new reading tables, index table, chairs, 2 new stacks and by repainting old equipment to harmonize.

During the year 766 books were bound, making the total volumes in the library 15,757. A total of 2559 reference questions were answered; 24 bibliographies compiled; 75 items borrowed from and 15 items loaned to other libraries; 94 photostats secured from the National Library of Medicine.

Circulation figures: books, 1717; journals, 8112; pamphlets, 37; indefinite loans, 218; total: 10,084.

In reviewing new books and journals added in 1959, interest is noted in radiological health, mental health, air pollution and sanitation. Many more items are needed in the radiological field but funds, as usual, are limited. The collection is not balanced but use must be made of categorical funds when they are available. Some extra funds were released for binding some back issues of journals.

GENERAL

Health education in Florida in 1959 included many day-to-day activities that need not be discussed in detail. Some of these were: the editing of the Annual Report; assistance with editing Annual Reports for several county health departments; a visit to the University of North Carolina to recruit health educators and a schedule made for a group of its graduate students to tour Florida; attendance at meetings and co-operation with Florida Education Association and Florida Congress of Parents and Teachers.

Direction of or assistance with all types of orientation and training: the three-day orientation programs for public health personnel; social welfare students; sanitarian trainees; Florida State University School of Nursing students; foreign visitors; summer students in public health at the Central Office.

The Teachers Project in Health Education required much time and effort through June and July (for details see the report of the Bureau of Maternal and Child Health elsewhere in this volume). A summer student employee was guided as was a colored health educator attached to the Venereal Disease section. Consultation was given in some measure to all the local health educators, with special attention given to the new ones in Brevard County and the Migrant Project in Palm Beach County. Visits were made to County Health Departments upon request.

Telecasts over an educational station (WJCT) took a disproportionate amount of time and effort, though excellent cooperation was received from professional personnel in the Central Office in these presentations. Numerous talks were made before varied groups and many meetings attended. The usual excellent relations with voluntary agencies were enjoyed. An exploratory health survey of a sampling of students at a local high school included a questionnaire on health facts and an interview on attitudes toward health. Assistance was given to a staff psychologist in a number of seminars on child growth and development.

BUREAU OF LOCAL HEALTH SERVICES

WADE N. STEPHENS, M.D., M.P.H.
Director

Hubert U. King, M.D.
Assistant Director

The Director of Local Health Services, aided by his assistant, supervises the directors of the County Health Departments and is responsible for their recruitment, orientation and training. He also furnishes consultation to them in the fields of administration and program balance. The records consultants teach the clerks, especially those newly employed, to fill out records properly and file them efficiently. The Divisions of Public Health Nursing and Sanitation and the Nutrition Services offer consultation, aid in recruitment, orientation and training in their respective fields.

COUNTY HEALTH DEPARTMENTS

At the end of 1959, there were 23 single County Health Departments employing full time health officers. There were 8 bi-county units and 9 tri-county units. St. Johns County remains the only one in the state without an approved County Health Department. It requires 60 physicians to operate the County Health Departments. Forty of these are the directors of units. Eight county health officers were newly employed during 1959, and there were 2 vacancies at the end of the year.

On December 31, 1959 there were 1372 employees on the payrolls of the 66 County Health Departments, an increase of 82 over last year. This expansion was made possible by a total budget of \$7,640,156, or \$1.82 per capita, of which \$5,232,596, or \$1.25 per capita came from county contributions and \$2,407,560 or 57 cents per capita from state and federal funds.

TRAINING

A four and one-half day Seminar in Public Health Administration was given November 30-December 4, 1959, to which all physicians employed in the past several years were invited. Twenty-one program directors from the State Board of Health contributed to the program, and 16 recently employed health officers, assistant health officers and residents in public health administration attended. The seminar filled a long felt need, and was well received by those attending.

During the year 2 county health officers received Master of Public Health degrees. There are now 23 county health officers who have received this degree, and 15 who are diplomates of the American Board of Preventive Medicine. The quality of Florida's health officers appears to be better than the national average.

HEALTH DEPARTMENT HOUSING

The building and remodeling of health centers has continued during the year. There are now only 27 of the 66 health departments housed in inadequate quarters. Thirty-nine are in comfortable quarters, either recently built or remodeled, and 6 more will be constructing new quarters during the next year or two.

The following County Health Departments had buildings erected in 1959: Franklin County, Apalachicola; Washington County, Chipley; Sarasota County, Sarasota; and Broward County (new county building, not Hill-Burton), Ft. Lauderdale. Auxiliary health centers were completed at Lake Wales and Haines City in Polk County and Pompano Beach in Broward County.

Sixty-nine subsidiary health centers are adequate for their purpose, but 48 remain inadequate.

RECORDS CONSULTATION SERVICE

The two records consultants made 139 visits to County Health Departments for the purpose of teaching the proper use of records and clarifying routine office procedures. In the course of these visits they gave orientation and elementary training to 9 newly employed clerks. They reviewed the filing systems and recommended changes in 10 counties. Most of the visits made also involved some activity in the interest of more accurate and complete vital statistics reporting. These consultants are responsible for the accuracy of the monthly reports of activities, so some visits were for the purpose of clarifying the instructions for filling out the report.

During 1959 extensive revisions were made in payroll procedures. The records consultants organized and conducted 6 district meetings at which the new procedures were explained. The changes caused but little confusion, so the meetings must be considered as very successful.

At the request of the director of the Accident Prevention Program, the consultants made a study of the records and files of 5 poison control centers. They are now equipped to help these centers, which are located in hospitals, keep better and more uniform records, and to improve their relationships with County Health Departments.

COUNTY HEALTH DEPARTMENT ACTIVITIES

The statistical report of County Health Department activities, printed in succeeding pages, is designed to show the numbers and types of program activities entered into by County Health Departments. It records the quantity of the service given in each listed category.

The number of nurses employed in all the County Health Departments increased from 503 at the end of 1958 to 541 at the end of 1959, an increase of 7.5 per cent. One index of nursing activity (total nursing

visits) shows that in a group of traditional public health programs the increase in activity was only 4 per cent. During the same time visits in the comparatively new programs (chronic diseases and mental health) increased 18.9 per cent. In 1959 a new activity, accident prevention, appeared on the report, showing 893 visits. These figures reflect changes in the character of the total public health program. They also give some basis for the belief that there has been a considerable increase in general efficiency, in spite of the fact that almost every one of the new nurses employed during the year was without previous public health experience.

There are few items in our activities report that give any indication of the results of all the activity reported. One index of results obtained in nursing program may be formulated by comparing the referrals made for diagnosis or treatment with the number of referrals completed. In 1958, 30.8 per cent of all referrals (except dental) were completed. The figures for 1959 show that 35.8 per cent were completed. This could be an indication of improved effectiveness in the field of referral follow-up.

The number of sanitarians employed increased from 277 in 1958 to 304 in 1959, an increase of 9.9 per cent. During the same period an index derived from the cumulative monthly report shows an increase of 17.4 per cent in overall sanitation activity. Of the many sanitation programs, those concerned with water supply and sewage disposal show the greatest increase. These are required by law and by agreement with the Federal Housing Administration and Veterans Administration, so they must be carried out. The pressure of these programs, has, in rapidly growing counties, prevented the necessary expansion of other activities. It appears that food inspection, a most important activity, is being spread more and more thinly, and is not keeping up with the growth of the state.

Both nurses and sanitarians are working harder than ever before, because their numbers have not kept pace with the demands made on them. Under ideal conditions there should be 385 sanitarians instead of 304, and 922 nurses instead of 541, to meet the demands of the estimated population of the state. The 1959 legislature imposed restrictions on the creation of new positions in County Health Departments which have slowed down the employment of new personnel. These restrictions will continue in force until the legislature meets in 1961. It is to be hoped they will then be relaxed to allow the normal expansion of health departments to meet the needs of a larger population.

NEW TRENDS IN LOCAL PUBLIC HEALTH PROGRAMS

Perhaps the most obvious of new trends is the increased interest in public health research at the community level, and in demonstration projects with research implications. At least 15 projects and studies were underway in various counties during the year. Five of these are fully developed research studies supported by funds from outside the county. At least 2 others are carefully planned studies carried on locally without additional financial aid. Eight or more were less well developed projects,

undertaken primarily for the purpose of future planning in smaller counties. This count may be incomplete, because such local projects are not always reported until the results are all recorded.

Newer case-finding techniques are beginning to be used. Skin-testing for tuberculosis was used in 64 counties; in at least 8 of these there were mass programs carried out on selected groups. The relatives of known diabetics were screened for diabetes in 11 counties.

The dental program at a local level has been greatly stimulated by the employment of 8 dentists recently graduated from dental school under the preceptorship of county dental societies. Before the development of this program only 3 counties had an organized dental program. In 1959 there were 11. The white mobile dental units of the State Bureau of Dental Health gave dental care in 9 additional counties, and the colored unit in 10.

There are now 5 localities where bedside nursing is included as a part of the duties of the public health nurse. This service is being well received, and will undoubtedly be extended to other areas in the future.

For some years many cities have been making long range plans for expansion and rebuilding. Now a number of counties are developing comprehensive plans for drainage, sewerage, water and zoning. It is usual to make the issuance of building permits contingent upon health department approval of sewage disposal and water facilities; as the county-wide drainage and sewage projects develop further they can be expected to improve the public health.

The mental health program continues to expand. There are now 16 guidance clinics employing 145 persons and serving the entire state as completely as is possible with this limited personnel. There are also 26 mental health workers in County Health Departments, who work with the clinics and participate in community mental health programs.

The Red Cross Gray Ladies are well known for their volunteer work in hospitals. In 1959 they were assisting in the health departments and schools as well. This efficiently organized group of volunteers has been found most helpful. Other counties may be expected to ask for such help in the future.

SUMMARY

Over the state, County Health Department activities show an increase in both quantity and quality over last year. There appears to be a steady increase in personnel and in the flexibility necessary for continued progress, although in many areas programs are not changing or expanding quickly enough to meet present and future needs. Greater attention is being given to long range planning and community organization. It seems certain that the Florida public health program will continue to be as dynamic in the future as it has been in the past.

DIVISION OF PUBLIC HEALTH NURSING

RUTH E. METTINGER, R.N.
Director

The Division of Public Health Nursing consists of a director, 5 nursing consultants, a nurse-midwife consultant and 2 clerical personnel.

The functions of the divisions are to: aid County Health Departments in the recruitment of qualified public health nurses; function, assist or organize orientation and basic training programs for nurses; promote inservice education programs in both academic and seminar forms; recommend nurses for out-of-state training; offer trained consultant service to public health nurses in the county units; evaluate County Health Department nursing services on request; aid in the supervised midwife training program and to issue midwife licenses upon recommendation and request of the director of the County Health Department; promote the organization of combination nursing services, especially in rural areas; and work in close cooperation with other bureaus and divisions, with other state agencies and with professional, voluntary and civic organizations to develop adequate public health nursing programs.

RECRUITMENT

As of December 31, 1949 there were 383 public health nurses employed in the County Health Departments, voluntary agencies and the Crippled Children's Commission. As of December 31, 1959 there were 615 public health nurses employed, an increase of 61 per cent in the 10-year period. Approximately 40 per cent of the number now employed have had the year of study in public health nursing.

At the end of the year there were 29 vacancies in the County Health Departments. The majority of the vacancies are to fill PHN II and higher classifications.

TRAINING

Continuous inservice education programs are accepted as a most important adjunct to good public health nursing by the majority of the public health nurses in Florida. Monthly inservice study groups are available in most areas for the nurses and there is increasing active participation. Classes are planned around the felt needs of the local group. Consultants assist by providing some reference materials, actually participating as the nominal leader of the group until local personnel are able to assume this role and by securing other resource persons.

Two and one-half day workshops in Human Relations and Leadership Skills were conducted in Jacksonville, Vero Beach, Tallahassee, Key West and Fort Lauderdale. A total of 113 nurses from County Health Departments and allied agencies participated in these experiences. Techniques in leadership, understanding self, understanding others, understanding

groups and inter-personal skills in nursing are used as basis for problem-solving discussions. (See report of Bureau of Mental Health elsewhere in this report.)

Twenty nursing supervisors and senior nurses participated in a three-day workshop in Jacksonville and Fort Lauderdale. These experiences are designed to help the supervisors work more effectively with staff nurses in improving nurse-patient relationships.

An evaluation of the inservice training center for nurses at Gainesville was made covering the period from 1945-59. One hundred and sixty-one public health nurses have had inservice training (2 months), 9 of them in 1959. Approximately 60 per cent of the nurses employed in the County Health Departments have not had formal preparation or experience in public health, therefore, it is imperative that a training center be continued.

Five scholarships were granted by the State Board of Health to public health nurses for advanced education in public health nursing. (See Scholarships for Professional Education elsewhere in this report.) Three nurses received scholarships to attend the three-weeks program in rehabilitation at The Kirkpatrick Memorial Institute of Physical Medicine and Rehabilitation, Winter Park.

In 1959 County Health Departments provided clinical experience in public health nursing for 77 basic nursing students from the following collegiate schools; Florida State University, Florida A & M University, University of Florida, University of Miami and Barry College.

Three graduate students from Peabody College and 2 from Vanderbilt University were assigned to the Hillsborough County Health Department for 3 months' field experience in public health nursing; Pinellas County Health Department accepted 3 students from Peabody and Palm Beach County Health Department accepted 1. Thirteen Southern Missionary College students, who received their clinical experience at Central Florida Tuberculosis Hospital at Orlando, received 120 hours field experience each at the Orange County Health Department, integrating their field work with clinical work in the hospital. A total of 22 out-of-state students received field experience in public health nursing in the County Health Departments.

The program for field experience is outlined by public health nursing instructors at the respective collegiate schools and upon approval by this division and by the nursing directors of the county health units where the students are accepted for affiliation, definite plans are made to be followed during the experience period. The consultants visit the area to assist in an advisory capacity.

Opportunity for observation of field experience was provided a number of public health nursing staff members, students in the basic course of nursing and other groups. Other persons receiving orientation or field training experience, or who observed the midwife program were

from South America, British West Indies, Barbados as well as the other states.

Miss Eli Magnussen, Director of the public health nursing section, Department of Health in Denmark, a consultant to World Health Organization, was invited by the U. S. Public Health Service and Children's Bureau to visit the United States to give consultation to states and other interested groups. Florida was included in her itinerary and she spent one week in the state observing the combination nursing programs in Clay, Baker, Volusia and Dade Counties.

Two separate American Red Cross courses in mother and baby care were conducted during 1959. The courses were co-sponsored by the County Health Department and high school. Parents attended the evening class and high school students comprised the day class.

CONSULTANT SERVICE

One new public health nurse consultant was added to the 5 already employed during the year. This decreases the area covered by each and permits more intensive service to rural counties who have the greatest need. A total of 189 visits were made to County Health Departments by division personnel to: give guidance and support to the public health nurses; improve the quality of service; coordinate nursing programs with the activities of the sanitarians, mental health workers and health educators; orient newly employed nurses; encourage intelligent use of records; and assist in evaluating the performance of nursing personnel.

One consultant will continue to serve as resource person for the nursing home program. She was instrumental in the development of the first short course ever offered in the South for nursing home administrators. (See report of Nursing Home Program elsewhere in this report). Routine inspection of the nursing homes in Jacksonville is done by this consultant.

Intensive assistance is given by one consultant on the Civil Defense program and disaster nursing. Classes and demonstrations were held in 9 counties during 1959. She also participated in the Accident Prevention Program.

Most significant is the increase in the number of requests for evaluation of nursing services. These were made in Orange, Franklin, Pasco, Sumter and Manatee Counties in 1959. Without exception these careful studies emphasize the need for additional nursing personnel, development of new programs and guidance in selecting priorities in nursing service.

MIDWIVES AND THEIR TRAINING

A sharp decrease in the number of midwives in Florida during the past decade is reflected in the following figures: midwives licensed in Florida as of December 31, 1949 were 439; as of December 31, 1959

there were 238. This represents a decrease of 46 per cent and a related increase in the adequacy of obstetrical care by physicians and hospitals. All of the midwives were reached through 21 midwife meetings and individual home visits by the midwife consultant. In all of the one-day educational meetings held in the County Health Departments throughout the state, the public health nursing staff in each area assisted the consultant in planning, scheduling and securing needed teaching aids; they also participated in the actual meeting.

COMBINED NURSING SERVICES

Increased emphasis was directed toward furthering the combination service, recommending that each nurse include in the generalized public health nursing program, the multiple functions of health teaching, prevention of illness, control of disease, rehabilitation and nursing care of the sick when visiting in the home.

The success of an approach to a combination service depends, to a great measure, on the organization of a citizens' committee which has to be activated prior to the establishment of the program or the employment of an additional nurse(s). The vital role of such a committee underscores an understanding and appreciation of the philosophy that forms the background of the combination service. Two major premises have to be kept in mind. If properly developed and established, this committee endorses the principle that participation by responsible and well-informed citizens, representing the entire county, is indispensable for the proper direction and growth of the service. The committee must realize that the role of the nurse in the performance of her various health duties. Informed people are needed to fashion a citizens' committee in order that community awareness may be hastened to an intimate individual appreciation and understanding of the value of this essential family service to the end that it may receive the type of sincere personal and community-wide support it deserves. Leadership, official and voluntary, must translate the meaning of the service to the people.

The above philosophy has and is being implemented by the personnel of this division in counties that have initiated the program and in counties contemplating the service. Palm Beach County Health Department started the service in the Glades area the latter part of 1959. Florida now has 5 combination services; Sarasota, Volusia, Clay and Baker Counties and in the Glades area. The division assisted Jefferson County Health Department and the western area of Volusia County with their preplanning for combining their respective services. These will be activated in 1960.

DIVISION OF SANITATION

A. W. MORRISON, JR.
Director

Division activity followed previously established lines during the first half of 1959. In July, however, additional activities, including responsibility for a number of environmental sanitation programs, were assigned to the division. Two experienced sanitarians were transferred to the division at this time bringing the consultant staff up to 5 members.

Work was completed on the revision of classification specifications for the sanitarian series early in the year. The new specifications were adopted by the Florida Merit System on June 12 and have been in use since that date.

New regulations covering the handling and distribution of frozen foods and a revision of regulations for educational, recreational and migratory labor camps were prepared during the year. These regulations were adopted by the State Board of Health as chapters of the State Sanitary Code. Studies were undertaken in 2 additional Code areas: food service and trailer parks. County Health Department sanitarians from various sections of the state served on the study committees. Revision of regulations in these and certain other areas of the Sanitary Code will be recommended during the coming year.

CONSULTANT SERVICE

The primary function of this division is to provide effective consultant services to the County Health Departments. Staff members made 293 field visits in 1959. Each of the 67 counties was visited at least once during the last 6 months of the year. The length of visits ranged from a few hours to 1 and 2 week periods, depending upon purpose of the visit and situations encountered.

Sanitation programs were evaluated in 4 counties. In each case, records were checked, activities studied and surveys were conducted to determine program coverage and effectiveness. Recommendations, based upon local needs, were made to the respective health officers and sanitarians.

Staff consultants participated in the planning and presentation of various training programs in the counties. Each also taught one or more classes in the Sanitarian Inservice Training Program. Some of the other activities of the consultants included: one staff member served for 2 months as part-time sanitation director of a County Health Department during a period of local reorganization; another conducted a sanitary survey of the 23 nursing homes in the City of Jacksonville and a third supervised the disinfection program of a tuberculosis hospital which was to be converted to a training center for children.

SANITARIAN INSERVICE TRAINING

Three inservice training courses were conducted during the year. As in previous years, each twelve-week course consisted of an eight-week didactic training period in Jacksonville with a four-week internship in selected County Health Departments. Twenty sanitarians from 15 Florida counties and a student from Honduras completed the program in 1959. The training course received highly favorable comments from U. S. Public Health Service representatives following an evaluation of the program.

SANITARIAN TRAINEES — 1959

County	Number	County	Number
Alachua	1	Orange	1
Broward	1	Pinellas	2
Charlotte	1	Polk	1
Dade	3	Putnam	1
Hillsborough	2	Sarasota	1
Manatee	1	Taylor	1
Marion	1	Volusia	2
Nassau	1	(Honduras)	1

Additional training activities included planning and conducting a short course in sanitation for State Barber Board inspectors and assistance in planning sanitation programs for state and national public health meetings.

FOOD HANDLER TRAINING

Efforts were directed toward designing food handler training programs for specific groups with special emphasis on managerial personnel. Staff consultants participated in the planning and presentation of this type program for school lunchroom supervisors from 6 central Florida counties in June. Similar assistance was provided for other food handler courses in Glades, Hendry, Orange, Taylor and St. Johns Counties during the year.

The counties reported 3435 food handlers certified in the regular six-hour courses in 1959. This total is significantly less than the previous year as the permanent courses in both Dade and Escambia Counties declined in attendance.

FOOD SANITATION

Since the primary purpose of all public health food sanitation programs is the prevention of food-borne diseases, considerable attention was devoted to improvement of methodology in this field. A packet of forms containing instructions for proper procedures in handling and recording food-borne outbreaks with a list of needed equipment and supplies for preparation of field investigation kits was adopted as an official record form. Each County Health Department was urged to prepare one or more of the

investigation kits for ready availability at all times. Three county sanitarians and 1 staff consultant attended a five-day USPHS training course on applied procedures for the control of food-borne diseases.

All counties continued control activity in the food service and food sales areas. An increasing number of counties are engaged in sanitation programs covering various food processing operations as this field rapidly expands. Consultants rendered assistance in the food area to County Health Departments, school lunchroom personnel and others throughout the year. The division maintained close liaison with related state and federal agencies in areas of mutual interest.

COMMON CARRIER CERTIFICATION

This division, through the County Health Departments, continued program activity covering the 22 airline caterers and 4 railroad commissaries operating in Florida. Survey reports were submitted to USPHS on a semi-annual basis for inclusion in certification listings.

The gigantic Miami International Airport terminal, opened in 1959, provided new facilities for one of the major airline caterers. Several other caterers were relocated in improved quarters during the year. The Dade County Health Department now has a sanitarian devoting full time to airport sanitation activities.

FOOD PROCESSING PLANTS

Rapid advances in the technology of food processing coupled with increasing consumer demand for processed food products continues to add to the number and variety of food processing plants in the state. Five additional counties engaged in sanitation activity in this field during the year raising the number involved to 21. Plants increased from 217 to 282 in 1959.

CAMP SANITATION

Although this program activity includes recreational and educational camps, major emphasis was again directed toward the improvement of migrant labor camp facilities in some 26 counties of the state. The 1959 Legislature passed a law requiring migrant labor camps be licensed by the State Board of Health. This law, which became effective in June, provided the necessary legal foundation for our program. Every effort was then made to develop camp regulations that would be effective, practical and enforceable in accordance with the law. Such action was completed in October and new camp regulations were adopted by the Board in November.

Considerable progress has been made by the counties involved in migrant labor camp activity.

BOTTLED WATER PLANTS

One new plant began operation during the year bringing the number of approved bottled water plants to 27 in the state. Three out-of-state plants are also approved to ship bottled water into Florida. Considerable activity was noted in proposals by established plants to add distilled, de-ionized or de-mineralized waters to their product list. In each case, the plants were required to install proper equipment for such processing and to provide proper labeling of the product offered for sale. Routine sampling and laboratory testing of all bottled waters is a continuing function of this program.

TOURIST AND TRAILER PARKS

Activities relating to operation of the tourist and trailer park program demanded a significant portion of the division's office and field time. Staff consultants worked with local sanitarians in a concerted attempt to bring program activity up-to-date in all counties. These efforts resulted in County Health Departments submitting 851 applications for permit during the last 6 months of the year. Applications covered new trailer parks, expansion of previously permitted parks, changes in park ownership and many facilities which had been operating without permit. Each application was carefully reviewed for conformance with legal requirements before a permit was issued. A total of 2310 tourist and trailer parks were operating under current state permit at the close of 1959.

RENDERING PLANTS

Regulations covering rendering plants became effective in January. Certain problems in odor control and the disposal of plant wastes from these establishments are currently being studied by the National Renderers Association. This industry-sponsored research may well lead to solution of existent problems. One new plant was constructed during the year raising the number of approved plants to 7. Several plants were visited by staff consultants and it is expected that increased local control of these establishments will be exercised by County Health Departments in the future.

SCHOOL SANITATION

This program is now handled in cooperation with the Bureau of Sanitary Engineering with major emphasis directed toward increased County Health Department participation in school construction activity. Operational aspects of the program continue to be carried out by local sanitarians. Escambia and Alachua County Health Departments prepared and distributed bound copies of their annual school sanitation survey reports. They have found this to be an effective method of maintaining high standards of sanitation in the schools of their respective counties.

HOUSING

In cooperation with the Leon County Health Department, housing survey activity was continued in Tallahassee. This project, using Leon County as a training source, is being expanded to include other County Health Departments in the further development of housing survey techniques. Hamilton County Health Department has made considerable progress in setting up procedures for a survey of all housing in the City of Jasper. This survey will use a modification of the Tallahassee short form evaluation and will utilize voluntary workers to conduct the survey. The Institute of Governmental Research, Florida State University, has assisted in planning and will train the voluntary workers. They will compile, evaluate and report findings in the Tallahassee, Jasper and subsequent surveys in accordance with a federal research grant.

TABLE 5
PERMITTED ESTABLISHMENTS AND FACILITIES — 1959

COUNTY	TRAILER PARKS	FOOD PROCESSING PLANTS	RENDERING PLANTS	BOTTLED WATER PLANTS
Alachua	80			1
Baker	2			
Bay	63			
Brevard	80	2		2
Broward	101	3	1	
Calhoun	2			
Charlotte	12	1		
Clay	15		1	
Collier	16	1		
Columbia	3			3
Dade	72	77	41	2
Duval	163	1		1
Escambia	144			
Flagler	2	1		
Franklin				
Gadsden	7			
Gulf	4			
Hamilton	8			
Hardee	3			
Hendry	3			
Highlands	6			2
Hillsborough	212	35	5	2
Indian River	13		2	1
Jackson	5	2		
Lake	35		1	
Lee	48	1		1
Leon	44			
Levy	5			
Madison	1			2
Manatee	75	7		
Marion	31	1		
Martin	26	5		1
Monroe	54			
Nassau	6			
Okaloosa	41			

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Okeechobee	2				1
Orange	101	8	2		1
Osceola	10				3
Palm Beach	62	12	1		
Pasco	84				3
Pinellas	239	54	1		
Polk	207	11	1		
Putnam	9	2	2		
St. Johns	10				1
St. Lucie	20	10	2		
Santa Rosa	18				2
Sarasota	65	23	1	1	
Seminole	12				
Sumter	17				
Suwannee	1				
Taylor	5				2
Volusia	63	25	1		
Walton	3				3
Out of State					
	2310	282	61	7	30

SANITARY NUISANCES

The majority of reports of insanitary conditions received by the division were referred to the County Health Departments for appropriate action. When necessary, staff consultants provided assistance to local health officers and sanitarians in these matters.

RECRUITMENT

Recruitment activities were continued with additional contacts being made at both state and private colleges and universities. Three students enrolled in the Sanitary Science program at Florida State University in September. One is a foreign student who plans to return to Thailand but the other two appear to be good prospects for sanitarian positions in the County Health Departments.

A sanitarian recruitment brochure was distributed early in the year and considerable progress has been made in the preparation of a color slide series to be used at "career day" programs in the high schools.

Articles by staff members:

Morrison, A. W., Jr. *Present Educational Requirements for Entry-Grade Sanitarians in the United States*. Sanitarian 21: 193-4, Jan.-Feb. 1959.

NUTRITION SERVICES

MARY BRICE DEEVER, M.S.
Director

Completing its first full year in the Bureau of Local Health Services, Nutrition Services has reflected some changes in policies, methods of operation and programs. There have also been some staff changes with one

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vacant position for a district consultant being filled and one staff member starting a year's educational leave to pursue graduate work in public health nutrition.

One of the primary responsibilities of Nutrition Services is to provide consultation, information and materials to the County Health Departments since the general health program should incorporate nutrition as an essential component of good health. To carry out this responsibility, the consultants have attempted during the year to acquaint each of their counties with the services available and to schedule regular visits to the county when requested. It is felt that regularly scheduled consultation will mean more efficient, continuous service to the health department and, consequently, better coverage for the community. It will also mean that with careful planning more counties can be reached with a reduction in time spent in travel.

During the year 61 counties have been visited. Services have varied with the individual needs and programs of the county ranging from direct service to clinic patients to inservice education for staff members.

In maternal and child health a number of home visits were made and individual patient referrals seen; 20 group conferences and 107 individual ones held; 11 classes were taught with a total attendance of 410. Increasing attention is being given to the area of mental retardation. This is a field in which much new information is available and assistance has been given directly to parents as well as consultation to professional personnel.

In school health 41 group conferences and 66 individual conferences were held; 50 classes and 30 talks given with a total attendance of 4262. These include services to both teachers and school lunch personnel.

In the chronic disease field home visits were made and individual patient conferences held with those having special problems. Classes were held for diabetics, heart patients and for weight control patients with a total attendance of 1737. This is an area where more requests are received and more attention is being demanded. Prevention and postponement of the onset of the chronic diseases and control and treatment after their development are both important; these topics are major interest ones in public health today and are requested in inservice education often.

Emphasis was placed on inservice education—fitting nutrition in as a part of total health. These meetings were held mainly for nurses and other health department staff members but in some instances professional personnel such as caseworkers from departments of welfare, hospital personnel, etc., were included. Eighty-two group conferences were held and 102 individual ones; 26 classes were taught, reaching 188 persons; 40 additional sessions were attended by nutritionists, serving as consultants for inservice meetings.

There were many requests for assistance with community programs, many of them concerned with weight control and many with food fads and

fallacies. As always, requests for talks were filled for PTA, civic clubs and other organizations, mainly on normal nutrition and child feeding.

A series of television programs on low sodium diet was presented and Nutrition Services was responsible for 4 of the regular weekly television programs of the State Board of Health. In addition, several of the consultants participated in radio programs during the year.

Dietary consultation to institutions is demanding more and more time. As the number of small hospitals, nursing homes and child caring facilities increases, so the requests for assistance with food service problems grow, for very few of these establishments have trained dietitians or, indeed, anyone trained in food service work available to them. It is impossible for the nutritionist serving 18 counties to spent sufficient time with dietary consultation to individual institutions. It is increasingly evident that this problem must be met through full time dietary consultation if we are to provide anything approaching adequate service in this area. One hundred and thirteen visits were made to such institutions and varied in length from one-half day to one week. During the year work has been done on a Manual for Child Caring Institutions and Nursery Schools and this will be available early in the next year.

In the area of training, field experience was offered for 1 graduate student from the University of North Carolina and 1 undergraduate student from the College of St. Elizabeth in New Jersey. In addition, several visits have been made, classes taught and consultation given in an effort to assist schools of nursing with nutrition in the public health training program. Efforts have been made also toward starting a long-range program for the recruitment and training of public health nutritionists.

Cooperation with other state agencies continued throughout the year. The entire staff participated in both state and county school lunch workshops given in various parts of the state. Cooperation has also been given to the Florida Committee on Rural Health in its statewide efforts to combat food fads and fallacies. This is a long term project which will be continued.

"Nutrition In A Nutshell", a bi-monthly publication mainly for health department personnel, gives an opportunity to disseminate information on some of the newer findings in the field. Each staff member contributes information to be included in it.

The Migrant Project has offered many opportunities for the nutritionist assigned to it to investigate and explore methods to improve the nutritional status as well as exploring the present status of the migrant workers. A special study on the dietary patterns and food habits was undertaken and completed and should be ready for publication soon.

It is hoped that efforts at closer planning and coordination with other divisions and bureaus which have been made during the year will continue and will result in more efficient service and better consultation to the counties.

TABLE 6
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1959

	Alachua	Baker	Bay	Bradford	Brevard	Broward	Calhoun	Charlotte	Citrus	Clay	Collier	Columbia	Dade	DeSoto	Dixie	Duval	Duval Special Program
A. COMMUNICABLE DISEASE CONTROL																	
1. Admissions to Service	15	28	69	286	33	761	13	34	16	155	64	0	155	35	156	29	
2. Field and Office Visits	25	28	88	519	242	1,035	16	36	16	181	89	0	601	115	221	41	
3. Hookworm Treatment Given	148	182	68	132	42	209	134	60	35	37	21	1,220	12	158	156	97	
TYPE OF IMMUNIZATION																	
4. Smallpox	1,637	465	2,090	393	1,551	3,178	426	648	130	173	774	705	13,115	188	185	1,762	
5. Diphtheria	2,669	563	1,493	612	2,933	4,134	362	803	301	344	999	1,858	12,428	523	484	4,310	
6. Whooping Cough	2,084	396	1,493	405	1,520	2,448	374	302	176	211	488	1,858	12,035	286	279	2,705	
7. Tetanus	3,644	1,208	4,200	903	3,239	5,012	1,148	1,021	486	527	1,225	3,147	20,062	556	525	6,173	
8. Polio	4,951	898	1,552	1,206	5,174	4,255	1,341	1,324	446	843	1,298	2,897	48,465	862	878	7,424	
9. Typhoid	1,540	775	6,763	182	1,862	399	861	82	378	4	630	2,202	417	41	424	888	
10. Rabies—Human	2	0	0	0	0	0	0	0	0	573	0	0	0	0	0	0	
11. Rabies—Animals	1,601	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B. VENEREAL DISEASE CONTROL																	
1. Admissions to Service	405	7	145	61	56	1,242	11	2	1	44	91	51	7,053	10	4	12,526	
2. Not Infected	8	3	64	22	6	528	0	0	0	18	6	0	4,470	1	3	9,709	
3. Treated by Priv. Physician	275	1	80	38	10	472	9	0	0	2	30	51	1,759	3	0	2,797	
4. Ret. to Treatment in this Clinic	2	2	0	0	14	36	0	0	0	3	2	7	0	0	1	4	
5. Epidemiological Treatment of Contacts	46	0	1	0	1	158	0	0	0	0	0	0	162	0	0	341	
6. Patients Interviewed	21	0	0	1	2	65	0	0	0	2	15	0	556	2	0	0	
7. Drooped or Transferred	182	4	44	61	33	273	1	0	0	3	22	61	1,064	7	2	1,187	
8. Contacts Obtained	77	0	76	31	16	254	1	0	0	1	22	11	1,881	33	2	1,816	
9. Field & Office Visits	478	23	272	130	131	6,192	15	2	2	98	246	126	31,883	33	6	22,187	
C. TUBERCULOSIS CONTROL																	
1. Admissions to Service—Case Active	32	2	21	11	24	157	11	8	2	12	21	6	222	6	7	233	
2. Adm. to Service—Case Inactive	128	6	79	20	71	231	3	18	8	10	17	24	1,984	8	33	7	
3. Adm. to Service—Contacts & Suspects	249	13	150	129	123	667	42	37	45	81	136	9	3,804	30	33	420	

TABLE 6 (Continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1959

	Escambia	Flagler	Franklin	Gadsden	Gilchrist	Glades	Gulf	Hamilton	Hardee	Hendry	Hernando	Highlands	Hillsborough	Holmes	Indian River	Jackson	Jefferson
A. COMMUNICABLE DISEASE CONTROL																	
1. Admissions to Service.....	71	15	9	5	37	3	40	63	161	4	61	238	9	1,300	17	5	71
2. Field and Office Visits.....	152	15	14	10	39	3	55	767	186	6	73	382	9	1,684	29	5	129
3. Hookworm Treatment Given.....	161	5	162	98	171	11	524	1,566	141	34	94	270	19	353	336	35	72
TYPE OF IMMUNIZATION																	
4. Smallpox.....	5,968	130	293	1,629	38	436	380	63	232	1,609	238	226	5,935	415	339	991	922
5. Diphtheria.....	6,426	377	219	2,704	122	101	842	767	413	407	382	579	11,858	877	707	2,399	877
6. Whooping Cough.....	4,376	157	221	840	62	50	801	1,800	270	209	270	845	6,555	449	379	1,187	357
7. Tetanus.....	9,714	459	660	4,364	225	119	1,237	1,800	573	429	865	596	15,674	1,204	987	3,823	1,646
8. Polio.....	5,923	1,079	1,101	5,134	472	240	1,563	1,498	1,084	818	649	753	17,492	1,143	993	4,375	1,031
9. Typhoid.....	6,007	15	517	2,312	72	4	1,166	194	50	35	13	42	1,892	331	497	2,074	143
10. Rabies—Humans.....	0	0	0	1	0	0	0	0	0	96	5	0	0	0	0	0	0
11. Rabies—Animals.....	0	0	0	0	0	77	156	439	0	0	0	0	30,145	0	0	0	370
B. VENEREAL DISEASE CONTROL																	
1. Admissions to Service.....	2,413	14	15	125	2	37	11	17	17	2	31	5	63	3,014	5	36	37
2. Not Infected.....	806	0	5	38	0	12	5	0	0	1	20	1	8	982	0	0	2
3. Treated in Clinic.....	1,578	10	8	31	2	12	5	15	15	1	10	4	32	1,456	2	31	18
4. Treated by Priv. Physician.....	18	1	2	15	0	0	1	0	0	0	0	0	1	82	0	1	2
5. Ret. to Treatment in this Clinic.....	9	0	0	0	0	0	0	0	0	0	0	0	25	9	1	4	1
6. Epidemiological Treatment of Contacts.....	9	0	0	35	0	0	0	0	0	0	0	0	4	388	0	7	1
7. Dropped or Transferred.....	2	0	0	6	0	0	0	0	0	0	0	0	0	73	0	0	1
8. Patients Interviewed.....	740	5	13	21	1	13	2	8	0	10	0	40	725	6	29	39	25
9. Contacts Obtained.....	968	0	4	44	1	13	2	4	0	13	0	25	1,359	0	19	14	14
10-11. Field and Office Visits.....	4,048	43	44	466	2	52	27	21	3	79	10	95	14,464	20	86	100	51
C. TUBERCULOSIS CONTROL																	
1. Admission to Service—Case Active.....	174	0	5	15	0	1	0	4	9	8	1	4	319	5	7	9	0
2. Adm. To Service—Case Inactive.....	225	10	12	35	0	3	21	17	18	24	17	46	742	13	41	65	12
3. Adm. to Service—Contacts & Suspects.....	1,286	1	53	216	13	6	107	9	20	24	17	95	4,215	45	46	64	17

TABLE 6 (Continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1959

	Lafayette	Lake	Lee	Leon	Levy	Liberty	Madison	Manatee	Marion	Martin	Monroe	Massan	Okaloosa	Okeechobee	Orange	Osceola	Palm Beach
A. COMMUNICABLE DISEASE CONTROL																	
1. Admissions to Service.....	3	74	32	575	110	83	26	13	95	9	106	98	107	5	562	7	77
2. Field and Office Visits.....	62	136	48	633	118	245	190	26	332	18	128	129	143	11	2,326	27	228
3. Hookworm Treatment Given.....	133	87	1,526	2,059	236	191	1,132	387	1,067	769	884	1,152	1,130	244	2,624	292	11,538
4. Smallpox.....	136	595	1,693	1,347	648	343	385	663	1,262	846	955	1,737	2,678	306	4,938	908	10,818
5. Diphtheria.....	91	370	789	1,342	246	206	405	387	838	383	424	737	1,849	130	3,073	636	3,145
6. Whooping Cough.....	270	625	3,035	3,132	868	563	1,630	3,031	2,231	1,104	1,606	2,485	3,380	478	6,389	911	13,985
7. Tetanus.....	357	1,246	3,091	2,556	686	1,020	2,075	1,301	4,738	1,740	459	3,009	3,566	161	3,402	444	1,035
8. Polio.....	165	22	815	2,069	475	386	562	85	2,263	942	918	4,080	2,261	0	0	0	0
9. Typhoid.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. Rabies—Humans.....	0	0	0	0	0	0	293	3,100	0	0	0	0	0	0	0	0	0
11. Rabies—Animals.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B. VENEREAL DISEASE CONTROL																	
1. Admissions to Service.....	11	19	107	892	22	1	18	313	682	52	103	18	78	25	411	32	848
2. Not Infected.....	13	4	9	121	1	0	8	78	122	6	6	8	2	1	2	47	190
3. Treated in Clinic.....	3	2	73	570	7	1	8	140	362	25	50	7	67	12	190	23	474
4. Treated by Priv. Physician.....	0	0	0	0	0	0	0	0	6	1	4	5	8	1	13	0	64
5. Ret. to Treatment in this Clinic.....	0	0	0	63	1	0	0	69	8	3	39	1	8	0	27	10	98
6. Epidemiological Treatment of Contacts.....	0	0	0	104	7	0	3	35	75	3	3	0	9	0	20	0	0
7. Dropped or Transferred.....	0	0	0	0	0	0	0	5	7	3	3	0	6	0	0	0	9
8. Patients Interviewed.....	2	2	73	404	7	0	18	97	285	33	34	6	65	12	120	27	183
9. Contacts Obtained.....	2	1	48	749	8	0	5	103	284	30	28	1	51	13	131	31	263
10-11. Field and Office Visits.....	47	42	160	2,888	38	2	61	638	1,909	85	326	91	109	43	1,634	84	1,950
C. TUBERCULOSIS CONTROL																	
1. Admission to Service—Case Active.....	3	52	26	91	7	1	4	27	23	22	19	6	26	4	50	15	147
2. Adm. to Service—Case Inactive.....	0	96	79	80	8	8	24	77	99	25	42	34	30	13	115	31	330
3. Adm. to Service—Contacts & Suspects.....	6	365	286	316	74	10	98	85	82	53	187	63	141	64	522	69	804

TABLE 6 (Continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1959

	Pasco	Pinellas	Polk	Putnam	St. Lucie	Santa Rosa	Sarasota	Seminole	Sumter	Suwannee	Taylor	Union	Volusia	Wakulla	Walton	Washington	Total for 1959
A. COMMUNICABLE DISEASE CONTROL																	
1. Admissions to Service.....	221	161	432	49	1	57	60	94	267	0	1	7	234	9	2	0	7,469
2. Field and Office Visits.....	407	372	732	56	2	81	79	145	269	0	1	7	543	9	12	0	12,793
3. Hookworm Treatment Given.....	62	63	589	26	6	145	24	26	95	133	97	134	387	122	96	442	11,872
TYPE OF IMMUNIZATION																	
4. Smallpox.....	838	2,147	3,831	891	88	760	689	170	294	182	387	122	351	236	398	455	84,499
5. Diphtheria.....	2,792	4,605	6,903	2,119	128	1,195	1,287	1,032	821	698	1,039	262	372	205	926	727	120,782
6. Whooping Cough.....	2,760	3,797	4,603	615	90	935	985	1,031	469	433	465	150	351	205	605	638	75,478
7. Tetanus.....	2,896	5,104	3,133	2,491	308	1,942	1,398	1,488	968	1,033	1,725	338	398	703	1,437	1,358	173,170
8. Poliomyelitis.....	2,992	8,159	10,392	2,392	479	2,264	2,179	1,823	1,498	1,612	1,578	643	1,240	1,051	2,475	1,287	215,194
9. Typhoid.....	377	412	646	67	27	1,354	7	17	283	411	643	282	23	581	468	411	58,695
10. Rabies—Human.....	0	0	3	0	0	0	0	0	0	0	0	0	0	0	15	0	82
11. Rabies—Animals.....	0	22	0	0	0	0	0	0	0	0	567	0	0	0	100	0	37,583
B. VENEREAL DISEASE CONTROL																	
1. Admissions to Service.....	62	893	412	73	95	20	183	123	40	26	40	10	108	9	15	38	33,313
2. Not Infected.....	31	150	65	5	6	6	110	12	4	7	5	0	6	1	1	0	17,722
3. Treated by Clinic Physician.....	28	320	261	48	79	6	67	71	26	19	21	10	70	2	8	25	11,332
4. Treated by Priv. Physician.....	4	9	38	11	1	9	5	3	0	2	10	0	7	0	0	0	294
5. Ret. to Treatment in this clinic.....	12	84	42	4	5	2	2	18	5	0	5	0	1	1	5	0	2,950
6. Epidemiological Treatment of Contacts.....	3	6	8	1	0	13	0	0	0	0	0	0	0	0	0	0	233
7. Dropped or Transferred.....	28	186	79	30	75	2	147	58	36	6	36	8	108	8	7	30	6,827
8. Patients Interviewed.....	16	233	34	15	32	11	164	120	18	3	21	28	79	1	8	21	9,421
9. Contacts Obtained.....	111	3,379	824	101	289	40	419	396	84	61	79	28	323	12	46	47	97,781
10-11. Field & Office Visits.....																	
C. TUBERCULOSIS CONTROL																	
1. Admission to Service—Case Active.....	20	122	89	14	21	18	20	35	9	15	3	1	57	0	5	9	2,150
2. Adm. to Service—Case Inactive.....	28	375	254	41	60	30	65	28	12	14	14	4	220	6	39	7	6,406
3. Adm. to Service—Contacts & Suspects.....	99	599	518	54	107	71	106	174	108	101	40	0	276	22	139	76	17,367

TABLE 6 (Continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1959

	Alachua	Baker	Bay	Bradford	Brevard	Broward	Calhoun	Charlotte	Citrus	Clay	Collier	Columbia	Dade	DeSoto	Dixie	Duval	Duval Special Program
Tuberculosis Control Cont'd.																	
4. No. of Persons X-rayed—Miniature Films.....	6,713	0	0	0	0	25,728	117	0	1,458	0	2,098	2,278	23,526	3,842	0	98	
5. No. of Persons X-rayed—Large Films.....	638	50	686	269	8,636	1,348	83	359	53	147	168	91	7,863	383	21	2,248	
6. Tuberculin Test.....	449	20	154	155	124	1,253	29	20	20	71	163	32	1,849	9	14	360	
7. Field Visits.....	755	20	73	429	561	3,264	134	145	17	234	398	103	5,239	74	36	1,330	
8. Office Visits.....	240	20	276	163	462	1,155	0	98	102	115	345	39	28,168	77	52	2,210	
9. Cases Hospitalized.....	22	3	13	8	19	99	0	2	1	2	10	6	707	2	3	25	
MATERNITY SERVICE																	
1-2. Patients Admitted to Maternity Medical Service.....	129	12	88	78	254	466	0	0	0	2	88	91	0	0	41	48	
3. Visits by Antepartum Cases to Medical Conferences.....	296	20	201	193	742	0	0	0	0	2	251	345	0	0	66	124	
4. Patients given Postpartum Medical Examinations.....	79	12	9	1	47	147	0	0	0	0	4	14	0	0	4	8	
5. Patients Admitted to Maternity Nursing Service.....	991	89	143	128	228	594	30	2	24	126	131	167	3,475	0	52	237	
6. Field Nursing Visits.....	1,252	95	154	456	847	537	14	5	44	446	186	339	9,618	0	93	290	
7. Office Nursing Visits.....	1,322	27	230	88	648	2,005	59	2	2	304	604	392	9,195	0	204	216	
8. Number of Midwife Meetings.....	55	2	2	0	9	34	3	0	0	18	29	55	94	0	0	0	
9. Visits for Midwife Supervision.....	8	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	
10. No. of Midwife Deliveries Supervised by Health Dept. Personnel.....	204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11. No. of Individuals Enrolled in Classes for Expectant Mothers.....																	
CHILD HEALTH SERVICES																	
1-2a. Adm. to Well Child Medical Service—Infants.....	241	2	65	62	142	498	3	1	1	44	31	82	4,395	0	10	282	
1-2-b. Adm. to Well Child Medical Service—4-14.....	64	7	18	114	242	34	2	12	21	52	43	128	5,987	0	5	152	
1-2-c. Adm. to Well Child Medical Service—5 over.....	17	2	6	80	111	14	0	16	12	189	34	121	3,153	0	2	111	
3. Visits to Well Child Medical Conference: Infants.....	279	2	162	120	144	816	3	3	1	63	62	82	9,849	0	10	727	
1-4.....	80	8	25	204	242	37	2	13	21	66	109	128	12,648	0	5	275	
5-over.....	29	2	8	132	113	14	0	16	12	197	58	121	5,396	0	2	127	

TABLE 6 (Continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1959

	Escambia	Flagler	Franklin	Gadsden	Gilchrist	Glades	Gulf	Hamilton	Hardee	Hendry	Hernando	Highlands	Hillsborough	Holmes	Indian River	Jackson	Jefferson
Tuberculosis Control Cont'd.																	
4. No. of Persons X-rayed—																	
a. Miniature Films.....	8,804	811	1,279	0	385	817	1,888	1,172	1,555	1,579	1,620	4,801	59,882	0	0	0	0
b. No. of Persons X-rayed—Large Film..	1,594	158	137	204	17	107	502	36	411	414	49	488	1,295	63	182	261	42
5. No. of Persons X-rayed—Tuberculin Test.....	614	90	32	290	6	11	34	19	16	65	14	187	7,075	163	169	38	36
6. Tuberculin Test.....	3,916	222	36	1,009	23	28	94	51	33	111	64	208	4,185	47	191	290	35
7. Field Visits.....	395	42	112	118	6	3	144	66	61	42	54	208	5,787	110	51	302	40
8. Office Visits.....	66	0	7	15	1	2	6	2	4	8	3	3	106	0	6	6	1
9. Cases Hospitalized.....																	
D. MATERNITY SERVICE																	
1-2. Patients Admitted to																	
a. Maternity Medical Service.....	461	61	7	363	2	20	18	10	28	63	16	12	2,076	5	0	137	47
3. Visits by Antepartum Cases	953	156	9	866	3	41	24	10	54	127	23	20	7,740	5	0	173	98
4. Patients given Postpartum	130	31	0	135	0	0	8	0	7	0	1	0	845	0	0	52	8
5. Medical Examinations.....																	
6. Patients Admitted to Maternity	894	71	13	800	45	34	24	139	91	49	24	14	2,687	23	87	380	90
7. Nursing Service.....	1,818	103	6	1,212	108	36	20	344	25	66	27	37	4,458	21	209	855	143
8. Field Nursing Visits.....	1,232	235	22	1,331	8	31	28	319	34	17	30	7	9,708	50	125	837	160
9. Office Nursing Visits.....	1	2	0	9	0	0	1	3	0	0	0	0	0	0	0	6	0
10. Number of Midwife Supervision.....	22	1	4	158	0	0	7	4	4	0	8	1	0	10	4	144	3
11. Visits for Midwife Deliveries.....																	
12. No. of Midwife Deliveries.....	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
13. Supervised by Health Dept. Personnel.	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0
14. No. of Individuals Enrolled in																	
a. Classes for Expectant Mothers.....																	
E. CHILD HEALTH SERVICES																	
1-2-a. Adm. to Well Child	325	25	0	194	0	1	1	0	10	9	1	4	2,962	6	0	16	31
b. Medical Service—Infants.....																	
1-2-b. Adm. to Well Child	66	9	0	125	0	0	2	0	4	10	0	0	4,830	8	0	4	4
1-2-c. Adm. to Well Child																	
a. Medical Service—1-4.....	9	0	0	16	0	0	0	0	1	1	0	1	4,688	1	0	6	6
b. Adm. to Well Child																	
c. Medical Service—5 over.....																	
3. Visits to Well Child Medical	496	37	0	217	0	1	1	0	10	9	1	4	5,833	6	0	16	85
a. Conference: 1-4.....	173	15	0	147	0	0	2	0	4	10	0	0	8,741	9	0	6	4
b. over.....	31	0	0	22	0	0	0	0	1	1	0	1	6,657	1	0	7	7

TABLE 6 (Continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1959

	Lafayette	Lake	Lee	Leon	Levy	Liberty	Madison	Manatee	Marion	Martin	Monroe	Massau	Ocala	Okeechobee	Orange	Osceola	Palm Beach
Tuberculosis Control Cont'd.																	
4. No. of Persons X-rayed—																	
a. Miniature Films.....	0	8,963	71	19,007	1,653	0	0	0	8,144	2,753	1,311	0	0	920	23,958	0	10,662
b. No. of Persons X-rayed—Large Film..	11	552	1,455	669	99	13	91	489	896	212	1,311	186	1,914	99	99	120	1,968
5. No. of Persons X-rayed—Tuberculin Test.....	0	140	647	185	27	2	76	552	1,540	468	240	18	1,591	309	449	77	7,019
6. Tuberculin Test.....	18	1,187	236	731	230	20	66	266	1,470	156	576	466	445	133	1,901	182	1,735
7. Field Visits.....	14	245	561	332	79	11	184	166	42	43	310	223	190	81	954	185	807
8. Office Visits.....	1	38	21	45	2	1	5	26	20	10	9	5	17	6	77	7	130
9. Cases Hospitalized.....																	
D. MATERNITY SERVICE																	
1-2. Patients Admitted to																	
a. Maternity Medical Service.....	4	93	177	180	73	6	55	94	0	0	58	7	16	0	893	72	346
3. Visits by Antepartum Cases	4	204	240	570	158	11	149	283	0	0	142	12	16	0	2,116	207	1,105
4. Patients given Postpartum	0	29	74	45	7	7	14	44	0	0	20	0	0	0	231	22	95
5. Medical Examinations.....																	
6. Patients Admitted to Maternity	20	259	419	345	99	15	164	124	80	3	146	74	91	0	767	114	752
7. Nursing Service.....	24	370	500	1,103	48	10	865	166	263	2	290	164	137	0	886	196	1,469
8. Field Nursing Visits.....	35	268	863	1,038	170	22	220	368	4	2	250	34	137	0	2,140	381	398
9. Office Nursing Visits.....	9	26	13	14	6	0	17	5	29	0	4	6	11	0	18	2	19
10. Number of Midwife Supervision.....																	
11. Visits for Midwife Deliveries.....	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0
12. No. of Midwife Deliveries.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52	0
13. Supervised by Health Dept. Personnel.																	
14. No. of Individuals Enrolled in																	
a. Classes for Expectant Mothers.....																	
E. CHILD HEALTH SERVICES																	
1-2-a. Adm. to Well Child	1	33	75	128	4	9	7	114	0	0	23	8	1	1	0	52	289
b. Medical Service—Infants.....																	
1-2-b. Adm. to Well Child	0	2	4	149	0	6	4	235	0	0	81	16	5	0	0	53	55
1-2-c. Adm. to Well Child																	
a. Medical Service—1-4.....	0	1	55	22	0	12	13	223	0	0	4	47	1	1	0	24	83
b. Adm. to Well Child																	
c. Medical Service—5 over.....																	
3. Visits to Well Child Medical	1	34	75	139	4	10	11	138	0	0	24	9	9	1	0	248	483
a. Conference: 1-4.....	0	3	4	236	0	8	4	296	0	0	38	16	5	0	0	94	117
b. over.....	0	1	55	23	0	12	14	249	0	0	4	47	1	1	0	59	130

TABLE 6 (Continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1959

	Pasco	Pinellas	Polk	Putnam	St. Lucie	Santa Rosa	Sarasota	Seminole	Sumter	Suwannee	Taylor	Union	Volusia	Wakulla	Walton	Washington	Total for 1959
Tuberculosis Control Cont'd.																	
4. No. of Persons X-rayed—																	
(a) Miniature Films.....	3,189	27,432	23,857	4,412	0	13	3,292	0	2,761	1	0	0	20,682	685	0	0	312,290
(b) No. of Persons X-rayed—Large Films.....	361	4,532	1,795	1,440	224	74	528	442	150	99	73	34	6,990	30	171	47	51,880
5. No. of Persons X-rayed—Large Films.....	3,019	3,358	2,802	1,465	30	291	82	76	476	73	128	15	2,001	42	94	121	36,635
6. Tuberculin Test.....	151	1,685	2,193	224	438	371	673	472	168	68	86	15	1,440	86	128	63	40,024
7. Field Visits.....	304	6,640	1,799	79	461	103	116	434	213	167	143	52	622	21	362	207	57,847
8. Office Visits.....	17	87	63	11	21	9	15	18	5	8	3	0	25	0	4	7	1,871
9. Cases Hospitalized.....																	
D. MATERNITY SERVICE																	
1-2. Patients Admitted to	16	597	1,004	162	226	2	99	130	15	11	40	40	202	41	7	25	12,347
(a) Maternity Medical Service.....																	
3. Visits by Antepartum Cases	24	2,761	2,845	451	787	3	379	231	18	13	56	111	989	114	8	25	36,808
4. Patients given Postpartum	1	322	151	63	0	0	69	46	2	0	4	2	102	12	2	11	3,870
5. Medical Examinations.....																	
6. Patients Admitted to Maternity	45	786	1,562	240	272	5	112	394	133	27	49	63	377	65	45	105	19,614
7. Nursing Service.....	35	1,171	2,763	350	382	5	419	660	117	19	52	46	764	155	78	182	37,003
8. Field Nursing Visits.....	118	3,614	4,637	540	1,044	6	471	347	109	58	113	111	397	56	125	153	46,871
9. Office Nursing Visits.....	0	22	63	15	4	0	0	13	2	1	2	0	0	0	2	1	248
10. Number of Midwife Meetings.....	0	0	0	0	0	0	0	83	31	2	9	0	52	20	12	10	1,490
11. No. of Midwife Deliveries Supervised by health dept. personnel.....	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	17
12. No. of Individuals Enrolled in Classes for Expectant Mothers.....	0	458	0	0	0	0	56	0	0	0	0	0	0	0	0	0	1,569
E. CHILD HEALTH SERVICES																	
1-2-a. Adm. to Well Child Medical Service—Infants.....	4	717	714	58	94	0	32	37	25	1	10	59	244	18	5	6	12,214
1-2-b. Adm. to Well Child Medical Service—1-4.....	25	723	107	25	0	3	28	0	15	0	3	29	383	2	3	3	13,874
1-2-c. Adm. to Well Child Medical Service—5-over.....	0	500	92	25	0	2	40	1	2	0	9	42	275	7	177	0	10,254
3. Visits to Well Child Medical Conference: Infants.....	4	1,389	1,138	63	163	0	44	37	25	1	11	68	616	18	7	6	23,812
1-4.....	25	1,193	180	27	0	3	44	0	15	0	5	82	834	2	3	3	26,215
5-over.....	0	715	99	32	0	2	56	1	2	0	9	96	504	8	181	0	15,255

TABLE 6 (Continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1959

	Alachua	Baker	Bay	Bradford	Brevard	Broward	Calhoun	Charlotte	Citrus	Clay	Collier	Columbia	Dade	DeSoto	Dixie	Duval	Duval Special Program
Child Health Services Cont'd.																	
6. Admissions to Nursing Service																	
1-4.....	820	143	112	238	365	910	25	29	21	172	88	223	4,000	2	73	655	
5-over.....	821	271	179	607	605	245	35	27	54	476	152	506	4,892	447	125	475	
7. Field Nursing Visits—1-4.....	1,040	182	382	343	485	4,841	76	473	42	1,127	237	202	8,140	1	157	764	
1-4.....	1,463	307	363	790	901	1,408	39	17	55	537	103	227	9,933	1	88	761	
5-over.....	1,483	617	413	1,875	1,583	732	66	51	211	1,037	196	456	10,378	338	100	600	
8. Office Nursing Visits—1-4.....	1,396	466	646	743	1,170	1,154	93	298	101	809	271	201	8,214	201	231	842	
1-4.....	817	55	387	60	322	1,529	26	59	3	82	153	132	6,925	3	39	994	
5-over.....	711	160	269	112	392	1,237	29	68	5	108	353	190	7,937	13	30	481	
9. Nurse-Teacher Conference.....	1,008	283	269	149	372	12,957	74	567	78	1,381	230	117	57,504	187	47	561	
F. SCHOOL HEALTH																	
1. Pupils Examined by Physician	104	43	35	262	39	1,784	9	95	149	213	8	59	4,823	5	95	79	
(a) Referred for Further Diagnosis.....	22	28	0	57	0	635	0	0	14	32	6	17	0	3	0	0	
(b) Referred for Further Diagnosis.....	14	0	0	46	0	7	0	0	2	8	6	10	0	2	0	3	
2. Pupils examined by physician	12	67	453	83	6	6,865	79	0	576	21	7	69	15,672	6	245	43	
(a) Referred for Further Diagnosis.....	10	5	30	27	0	2,357	0	0	39	1	5	12	0	1	2	0	
(b) Referred for Further Diagnosis.....	11	0	0	25	0	394	0	0	0	0	3	9	0	1	0	43	
3. Screening by other health department personnel—Visual.....	777	74	8,595	188	4	1,747	111	1,505	210	1,550	1,957	0	40,540	0	180	20,499	
(a) Referred for Further Diagnosis.....	268	12	661	43	0	777	38	75	36	183	506	0	4,754	0	43	1,861	
(b) Referred for Further Diagnosis.....	276	8	117	26	3	539	25	23	11	97	141	0	1,231	0	10	363	
4. Screening by other health department personnel—Audiometer testing.....	1,292	567	837	0	0	226	133	1,708	1	1	273	0	95,207	87	3	94	
(a) Referred for Further Diagnosis.....	181	1	85	0	0	51	1	19	1	1	33	0	1,091	2	2	12	
(b) Referred for Further Diagnosis.....	107	0	0	0	0	3	0	5	0	0	25	0	439	0	1	1	
G. DENTAL HEALTH																	
1. Number of Dental Inspections.....	5,419	425	0	0	1	3,597	0	382	254	97	0	0	0	0	184	68	445
2. Number Requiring Treatment.....	1,711	380	0	0	1	2,103	0	232	99	29	0	0	0	0	131	124	427

TABLE 6 (Continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1959

	Escambia	Flagler	Franklin	Gadsden	Gilchrist	Glades	Gulf	Hamilton	Hardee	Henry	Hernando	Highlands	Hillsborough	Holmes	Indian River	Jackson	Jefferson
Child Health Services Cont'd.																	
6. Admissions to Nursing Service																	
1-4.....	876	87	30	892	58	23	10	84	80	59	15	15	4,065	25	184	297	209
5-over.....	289	179	36	1,699	138	4	47	41	31	20	68	13	7,150	29	78	459	318
7. Field Nursing Visits—Infants.....	1,580	120	54	770	6	14	109	22	279	63	80	106	11,279	134	267	301	248
1-4.....	2,363	122	43	1,539	180	52	8	216	29	127	84	89	8,408	27	265	789	374
5-over.....	884	146	57	3,181	843	11	43	266	86	37	108	26	3,243	23	227	1,303	452
8. Office Nursing Visits—Infants.....	1,490	63	51	1,004	42	22	127	141	161	53	106	134	6,044	104	457	668	113
1-4.....	1,314	104	12	815	10	0	10	161	13	7	15	2	3,288	20	114	113	251
5-over.....	3,370	201	38	299	25	7	72	18	14	38	8	4	13,372	40	47	59	270
9. Nurse-Teacher Conference.....	3,842	116	26	454	1	7	296	29	357	207	74	82	14,394	222	281	178	222
5-over.....	2,638	27	39	1,115	8	54	813	292	168				8,790	132	613	515	133
F. SCHOOL HEALTH																	
1. Pupils Examined by Physician																	
(a) with parent present.....	102	95	11	363	40	40	70	317	20	164	201	689	2,063	226	180	12	163
(b) Referred for Further Diagnosis.....	16	7	3	85	1	0	5	5	6	9	9	125	236	0	1	2	9
(c) Completed Referrals.....	1	0	0	17	0	0	0	0	0	11	0	38	185	0	0	1	2
2. Pupils Examined by Physician																	
(a) with parent not present.....	20	13	12	380	155	135	67	239	223	368	691	170	3,584	275	94	23	10
(b) Referred for Further Diagnosis.....	2	3	0	72	1	0	0	7	4	2	45	0	329	0	0	0	0
(c) Completed Referrals.....	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
3. Screening by other health department personnel—Visual.....	16,018	744	73	2,364	390	2	440	4	517	123	163	63	57,156	131	396	1,762	395
(b) Referred for further Diagnosis.....	2,578	60	19	213	11	0	57	4	66	7	6	18	8,462	6	60	228	16
(c) Completed Referrals.....	389	0	0	84	5	0	0	0	0	0	11	8	2,171	7	68	47	8
4. Screening by other health department personnel—Audiometer testing.....	2,414	48	4	783	0	9	122	0	872	5	0	9	27,394	3	156	247	0
(b) Referred for Further Diagnosis.....	128	0	0	25	0	0	0	0	4	0	0	0	2,141	0	87	9	0
(c) Completed Referrals.....	10	0	0	22	0	0	7	0	0	0	0	0	964	0	16	1	0
G. DENTAL HEALTH																	
1. Number of dental inspections.....	1,235	0	3	0	0	0	0	0	0	0	0	124	28,133	189	0	0	253
2. Number requiring treatment.....	1,053	0	3	0	0	0	0	0	0	0	0	90	15,203	162	0	0	218

TABLE 6 (Continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1959

	Lafayette	Lake	Lee	Leon	Levy	Liberty	Madison	Manatee	Marion	Martin	Monroe	Nassau	Ocala	Okeechobee	Orange	Osceola	Palm Beach
Child Health Services Cont'd.																	
6. Admissions to Nursing Service																	
1-4.....	64	276	319	491	32	41	175	173	107	38	138	67	77	1	1,069	154	651
5-over.....	107	470	445	633	82	54	137	304	129	167	429	82	112	1	1,152	317	263
7. Field Nursing Visits—Infants.....	98	638	612	694	105	61	876	1,163	787	92	773	360	557	100	1,388	323	2,444
1-4.....	144	407	405	1,567	29	28	395	214	233	213	870	115	116	1	1,433	167	2,120
5-over.....	264	548	518	1,847	82	62	189	207	329	170	715	210	186	1	1,697	480	869
8. Office Nursing Visits—Infants.....	245	816	418	2,262	109	67	268	395	1,104	104	207	382	733	51	2,193	98	3,686
1-4.....	46	111	135	24	9	27	63	118	8	3	59	178	61	2	2,891	262	172
5-over.....	57	247	128	14	10	24	21	256	7	7	69	178	125	4	5,195	452	184
9. Nurse-Teacher Conference.....	80	247	386	47	31	28	465	1,286	224	54	1,283	863	390	84	12,025	431	7,730
5-over.....	31	506	208	459	50	81	295	1,119	1,113	235	666	419	626	52	1,597	292	4,949
F. SCHOOL HEALTH																	
1. Pupils Examined by Physician																	
(a) with parent present.....	35	731	1	469	255	47	7	212	0	79	191	47	425	57	106	110	198
(b) Referred for Further Diagnosis.....	0	50	0	18	11	1	8	13	0	8	15	0	40	2	2	1	28
(c) Completed Referrals.....	0	24	3	1	1	1	0	0	0	0	3	0	1	0	0	0	33
2. Pupils Examined by Physician																	
(a) with parent not present.....	94	166	103	41	308	26	10	94	5,758	51	339	65	620	2	16	5	39
(b) Referred for Further Diagnosis.....	3	8	5	2	10	4	1	17	1	7	63	3	13	0	0	0	31
(c) Completed Referrals.....	3	0	0	1	1	0	5	0	0	8	3	0	0	0	0	0	1
3. Screening by other health department personnel—Visual.....	5	2,205	904	4,872	1,363	137	223	1,413	2,780	847	5,222	32	1,047	64	10,320	102	22,223
(b) Referred for Further Diagnosis.....	4	435	125	734	100	7	40	217	430	54	423	5	104	32	752	30	1,344
(c) Completed Referrals.....	3	107	14	248	50	3	5	18	126	2	127	6	36	9	747	18	260
4. Screening by other health department personnel—Audiometer testing.....	0	202	33	2,766	1,297	4	0	0	395	210	2,827	100	8	16	1,057	64	4,592
(b) Referred for Further Diagnosis.....	0	33	0	171	36	0	0	0	9	2	28	0	0	7	40	15	285
(c) Completed Referrals.....	0	4	0	68	23	0	0	1	1	0	15	0	0	0	8	4	163
G. DENTAL HEALTH																	
1. Number of dental inspections.....	0	3,760	0	0	0	0	0	11	0	0	0	0	0	0	29,502	0	2,642
2. Number requiring treatment.....	0	2,796	0	0	0	0	0	5	0	0	0	0	0	0	13,393	0	1,496

TABLE 6 (Continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1959

	Pasco	Pinellas	Polk	Putnam	St. Lucie	Santa Rosa	Sarasota	Seminole	Sumter	Suwannee	Taylor	Union	Volusia	Wakulla	Walton	Washington	Total for 1959
Child Health Services Cont'd.																	
6. Admissions to Nursing Services																	
1-4.....	47	1,043	2,214	192	254	20	115	328	130	87	71	94	354	64	58	98	23,882
5-over.....	106	1,525	2,251	166	367	71	105	455	136	277	105	139	310	129	138	196	31,376
7. Field Nursing Visits—Infants.....	237	6,782	4,533	225	514	1,805	387	703	56	344	133	133	2,036	175	1,339	20	63,909
1-4.....	18	1,766	3,897	285	514	63	411	583	134	59	68	71	665	141	98	132	43,254
5-over.....	62	2,181	4,742	279	831	167	402	724	145	228	142	289	497	180	140	285	59,022
8. Office Nursing Visits—Infants.....	140	6,433	3,629	828	25	548	962	1,182	49	207	114	219	2,128	122	248	27	57,816
1-4.....	49	2,071	4,206	131	203	35	33	188	90	116	49	84	266	63	127	70	33,206
5-over.....	120	2,459	3,138	213	10	213	24	322	89	201	40	134	288	66	202	98	40,986
9. Nurse-Teacher Conference.....	433	13,232	6,165	444	1	2,150	355	1,198	90	359	64	180	3,366	130	1,614	16	151,661
	474	10,980	5,535	309	1	792	1,329	982	160	191	83	24	575	66	76	38	85,312
F. SCHOOL HEALTH																	
1. Pupils Examined by Physician with parent present.....	12	12,096	1,240	150	0	321	27	97	162	31	2	94	206	73	188	115	30,842
(b) Referred for Further Diagnosis.....	1	12,024	229	4	0	183	12	17	37	0	1	6	1	4	3	1	13,972
(c) Completed Referrals.....	0	2,127	12	0	0	18	7	0	5	0	0	3	1	0	0	0	2,564
2. Pupils Examined by Physician with parent not present.....	1	2,646	185	45	0	224	130	27	36	119	22	97	20	100	420	247	42,719
(b) Referred for Further Diagnosis.....	1	2,950	10	2	0	102	39	3	0	0	0	7	0	4	1	0	6,707
(c) Completed Referrals.....	0	502	9	0	0	43	12	1	0	0	0	5	0	0	0	0	1,476
3. Screening by other health department personnel—Visual.....	87	57,021	10,897	798	0	820	7,924	287	563	220	1	132	11,425	807	947	288	304,605
(b) Referred for Further Diagnosis.....	36	3,698	1,230	50	0	136	484	57	66	21	1	24	686	58	236	21	27,697
(c) Completed Referrals.....	19	2,162	163	31	0	52	166	63	29	10	0	13	158	20	37	8	10,465
4. Screening by other health department personnel—Audio-meter testing.....	4	30,305	971	1	0	0	1,186	34	1	90	0	0	9,453	0	167	395	128,168
(b) Referred for Further Diagnosis.....	0	787	5	0	0	0	77	4	0	3	0	0	152	0	11	8	5,613
(c) Completed Referrals.....	0	367	5	0	0	38	33	0	0	0	0	0	17	0	1	0	2,386
G. DENTAL HEALTH																	
1. Number of dental inspections.....	115	33,386	2,507	0	0	0	167	0	378	1,245	0	0	3,188	0	228	0	117,938
2. Number requiring treatment.....	105	14,200	1,996	0	0	0	132	0	0	893	0	0	2,435	0	188	0	59,606

TABLE 6 (Continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1959

	Alachua	Baker	Bay	Bradford	Brevard	Broward	Calhoun	Charlotte	Citrus	Clay	Collier	Columbia	Dade	DeSoto	Dixie	Duval	Duval Special Program
Dental Health Cont'd.																	
3. Number completing treatment.....	2,145	100	0	0	0	0	439	0	99	0	0	0	239	0	0	49	1
4. Number Admitted to Clinic for treatment.....	1,243	150	0	0	0	0	714	0	99	0	218	0	1,139	0	124	153	1
5. Total fillings.....	3,546	100	0	0	0	0	2,746	0	99	0	400	0	5,164	0	54	486	1
6. Total extractions.....	293	0	0	0	0	0	0	0	17	0	267	0	1,620	0	33	95	1
7. Topical applications of fluoride.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
H. CHRONIC DISEASES																	
1. Adm. to Cancer Service.....	49	5	90	49	35	189	15	15	6	45	56	11	66	10	4	8	1
2. Field Visits—Cancer.....	57	7	108	234	80	164	20	41	9	105	252	11	701	73	3	53	1
3. Office Visits—Cancer.....	161	6	240	77	37	624	9	53	6	30	93	11	27	28	2	18	1
4. Adm. to Orthopedic Service.....	54	4	144	74	113	88	30	53	25	71	35	0	16	83	27	39	1
5. Field Visits—Orthopedic Service.....	185	17	450	283	473	204	87	62	41	224	167	0	55	143	6	4	1
6. Office Visits—Orthopedic Service.....	139	5	43	110	221	44	28	19	29	240	46	0	12	5	8	4	1
7. Adm. to Diabetes Service.....	8	13	19	32	32	29	8	13	13	137	43	0	3	4	14	6	1
8. Field Visits—Diabetes.....	87	15	68	54	150	164	1	17	33	137	54	0	18	9	14	4	1
9. Office Visits—Diabetes.....	16	19	63	80	126	88	45	39	14	16	54	0	78	4	20	9	104
10. Adm. to Cardiovascular Renal Disease.....	14	31	35	88	61	18	1	2	27	58	5	0	1,409	4	8	9	975
11. Field Visits—Cardiovascular Renal Disease.....	28	67	95	271	212	38	0	2	23	219	55	0	15	0	68	1	0
12. Office Visits—Cardiovascular Renal Disease.....	20	112	113	134	210	13	11	0	82	18	8	0	0	0	0	0	0
J. MENTAL HEALTH																	
1. Admission to Service—Children.....	262	16	1	5	45	291	5	18	16	43	178	0	994	28	9	12	1
2. Adm. to Service—St. Hospital Pta.....	94	1	49	17	38	23	7	9	16	18	5	0	196	2	2	53	1
3. Adm. to Service—Other Adults.....	125	2	0	9	59	356	5	0	4	51	62	2	143	1	1	11	1
4. Field Visits—With Patients.....	432	13	127	55	114	149	16	27	69	79	81	0	762	4	12	118	1
5. Office Visits—With Patients.....	376	49	56	31	176	536	35	38	145	92	136	2	1,180	27	14	73	1
6. Office Visits—About Patients.....	276	2	3	38	67	1,240	10	26	4	36	892	2	4,598	27	1	1	1
7. Office Visits—About Patients.....	417	14	1	20	104	1,760	73	62	12	66	475	0	4,900	33	2	16	1
8. Mental Health Conferences.....	609	107	0	10	112	2,254	0	22	136	27	249	0	1,072	79	7	55	1

TABLE 6 (Continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1959

	Pasco	Pinellas	Polk	Putnam	St. Lucie	Santa Rosa	Sarasota	Seminole	Sumter	Suwannee	Taylor	Union	Volusia	Wakulla	Walton	Washington	Total for 1959
Dental Health Cont'd.																	
3. Number completing treatment.	61	1,019	81	0	0	0	0	0	0	0	40	0	355	0	7	0	8,538
4. Number admitted to clinic for treatment.	49	1,146	170	0	0	0	0	0	51	183	0	0	424	0	0	0	12,549
5. Total fillings.	78	4,372	646	0	0	0	1	0	64	204	0	0	1,371	0	0	0	27,868
6. Total extractions.	55	722	439	0	0	0	0	7	38	41	0	0	534	0	0	0	11,848
7. Total applications of fluoride.	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	4
E. CHRONIC DISEASES																	
1. Adm. to Cancer Service.	28	483	334	13	14	45	62	17	28	15	15	10	59	6	8	15	3,640
2. Field Visits—Cancer.	4	1,414	294	52	28	50	576	32	39	17	68	36	511	14	8	34	8,968
3. Office Visits—Cancer.	32	1,341	1,293	8	8	53	27	9	25	13	60	12	10	3	4	27	9,305
4. Adm. to Orthopedic Service.	44	88	125	85	48	83	94	31	50	87	34	13	113	29	76	33	4,750
5. Field Visits—Orthopedic Service.	24	709	378	156	140	180	403	172	92	106	80	13	583	113	216	112	12,612
6. Office Visits—Orthopedic Service.	140	12	87	52	46	216	15	56	55	121	57	11	12	13	140	64	4,746
7. Adm. to Diabetes Service.	13	172	184	9	6	29	38	5	5	25	14	17	83	7	7	11	2,328
8. Field Visits—Diabetes.	13	371	664	14	12	23	142	7	5	2	27	8	1,610	25	69	6	7,427
9. Office Visits—Diabetes.	124	794	230	9	0	67	14	1	18	38	63	87	292	37	278	77	11,800
10. Adm. to Cardiovascular Renal Disease.	18	374	123	10	3	56	73	11	11	79	9	6	55	1	21	8	3,460
11. Field Visits—Cardiovascular Renal Disease.	4	4,192	226	35	10	40	973	26	6	22	1	7	1,291	6	36	10	17,216
12. Office Visits—Cardiovascular Renal Disease.	35	789	151	9	0	149	2	4	15	360	10	6	0	0	83	13	7,087
J. MENTAL HEALTH																	
1. Admission to Service—Children.	5	60	274	11	166	85	54	64	6	0	29	0	193	3	10	0	5,786
2. Adm. to Service—St. Hospital Pts.	17	277	98	19	3	13	59	27	10	2	7	1	89	22	24	2	2,235
3. Adm. to Service—Other Adults.	4	187	109	7	51	6	171	50	3	4	3	2	87	4	1	0	2,791
4. Field Visits—With Patients.	33	330	265	45	51	48	491	172	17	17	12	4	304	1	31	5	7,465
5. Office Visits—With Patients.	12	476	312	67	42	65	922	806	28	3	27	5	281	6	43	14	10,503
6. Office Visits—About Patients.	16	167	1,317	11	1,076	12	173	24	15	6	27	12	541	5	15	2	19,206
7. Office Visits—About Patients.	6	522	1,126	13	713	104	185	333	29	3	12	0	2,967	2	34	3	22,900
8. Mental Health Conferences.	0	184	406	8	362	46	328	136	1	0	0	0	1,132	0	0	0	10,211

TABLE 6 (Continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1959

	Alachua	Baker	Bay	Bradford	Brevard	Broward	Calhoun	Charlotte	Citrus	Clay	Collier	Columbia	Dade	DeSoto	Dixie	Duval	Duval Special Program
K. MISCELLANEOUS																	
1. Adm. Morbidity Service.	268	36	90	277	47	37	14	9	17	300	117	265	41	26	65	23	4
2. Field and Office Visits—Morbidity.	546	133	320	700	366	98	31	88	62	812	285	459	399	67	328	40	9
3. General Medical Examinations.	151	0	24	132	83	1,708	24	0	76	36	21	228	2,071	18	197	5,487	0
4. Health Cards Issued.	3,051	117	2,304	284	2,909	14,492	76	336	351	256	494	228	17,746	368	197	0	0
5. Visits in the Interest of Vital Statistics.	34	6	121	59	95	21	3	9	7	20	8	2	56	55	106	0	0
6. Conferences or Visits in the Interest of Civil Defense.	0	0	10	38	18	0	2	0	0	72	1	0	0	1	0	0	0
7. Visits in the interest of reported accidents, including poisoning.	52	0	13	14	1	68	0	0	1	0	1	0	238	0	0	0	0
M. NURSING HOMES																	
1. Number of Nursing Homes Admitted to Service.	3	0	8	1	5	30	1	0	0	2	0	1	95	0	0	29	0
2. Visits to Nursing Homes.	65	0	24	9	19	205	1	0	0	3	0	2	951	0	0	111	0
P. SANITATION																	
1. Approved Water Supplies Installed, Private & Semi-Public.	498	0	0	0	419	671	0	1	1	3	0	0	5	0	1	147	0
2. Approved Water Supplies Installed, New Public Water Connections.	26	0	0	0	66	1	0	0	0	0	0	0	0	0	0	5,881	2
3. New Specification Privies Installed.	24	5	0	0	5	0	2	2	0	0	0	0	0	0	0	0	0
4. Percolation Water Table or Soil Log Test.	1,736	4	240	36	3,714	163	3	13	79	251	82	2	295	1	15	2,062	0
5. Subdivision Analysis.	142	5	9	5	124	91	0	1	2	4	11	0	9	2	4	19	0
6. Pollution Survey.	11	0	3	1	4	189	0	0	0	0	0	0	0	2	0	0	0
7. New Specification Septic Tanks Installed.	1,268	52	534	102	2,287	6,016	38	364	17	60	211	394	6	120	13	646	0
8. Rabies—Number of Animal Bites Investigated.	273	10	37	21	359	1,328	0	69	5	64	35	23	2,938	23	3	901	0
9. Field Visits for Rabies Investigation.	912	11	62	30	609	2,835	1	33	5	233	64	37	10,164	45	6	0	0
10. Complaints Investigated.	721	13	216	64	987	1,230	11	162	52	46	85	16	7,664	73	38	1,982	0
11. Nuisances Corrected.	207	17	162	29	230	822	3	88	24	29	892	64	4,113	13	19	913	0
12-19. Field Visits.	7,847	501	3,707	177	13,177	13,753	251	1,865	826	892	835	1,606	48,386	499	163	7,832	0

TABLE 6 (Continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1959

	Escambia	Flagler	Franklin	Gadsden	Gilchrist	Glades	Gulf	Hamilton	Hardee	Hendry	Hernando	Hillborough	Holmes	Indian River	Jackson	Jefferson
K. MISCELLANEOUS																
1. Adm. Morbidity Service	251	112	28	75	78	81	57	337	26	55	2	85	971	42	28	4
2. Field and Office Visits—Morbidity	2,016	282	48	791	284	120	156	704	142	237	44	124	5,450	153	153	5
3. General Medical Examinations	628	48	44	63	40	76	183	12	7	26	57	230	818	38	35	25
4. Health Cards Issued	9,895	187	350	707	108	59	289	263	502	398	239	823	39,370	156	485	154
5. Visits in the Interest of Vital Statistics	39	19	2	286	5	5	98	6	1	31	2	45	5	5	6	59
6. Conferences or Visits in the Interest of Civil Defense	3	0	0	0	0	0	4	0	0	0	0	0	2	3	0	0
7. Visits in the Interest of reported accidents, including poisoning	66	0	0	0	0	0	1	0	0	7	0	0	152	0	0	0
M. NURSING HOMES																
1. Number of Nursing Homes	17	0	0	0	0	0	0	0	1	0	2	3	34	2	0	1
2. Visits to Nursing Homes	126	0	0	0	0	0	0	0	7	0	7	8	787	24	18	2
P. SANITATION																
1. Approved Water Supplies Installed, Private & Semi-Public	748	0	0	51	0	1	2	0	0	3	0	63	1,033	0	0	8
2. Approved Water Supplies Installed, New Public Water Connections	1,714	0	0	366	0	0	50	0	1	2	5	0	1,685	0	0	2
3. New Specification Privies Installed	37	3	0	65	1	1	0	5	0	1	0	0	176	0	1	11
4. Percolation Water Table or Soil Log Test	107	70	35	59	0	0	30	1	1	22	43	36	1,087	82	109	6
5. Subdivision Analysis	18	2	0	5	0	4	0	0	0	15	1	85	118	0	22	0
6. Pollution Survey	11	0	0	61	0	0	0	0	0	0	0	0	19	0	0	0
7. New Specification Septic Tanks Installed	2,034	60	14	123	62	25	53	11	96	108	65	749	3,235	28	111	46
8. Rabies—Number of Animal Bites Investigated	987	2	10	6	4	20	10	10	16	6	4	39	2,808	16	22	10
9. Field Visits for Rabies Investigation	3,521	6	38	11	3	30	1	36	23	14	5	72	12,325	18	24	8
10. Complaints Investigated	2,550	14	112	73	3	26	12	24	46	77	54	130	2,837	37	203	26
11. Nuisances Corrected	2,406	8	40	149	3	7	2	7	10	22	24	60	2,770	20	21	4
12-19. Field Visits	26,098	141	375	940	596	218	697	325	782	650	402	2,646	40,352	203	914	473

TABLE 6 (Continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1959

	Lafayette	Lake	Lee	Leon	Levy	Liberty	Madison	Manatee	Marion	Martin	Monroe	Nassau	Okaloosa	Okechobee	Orange	Osceola	Palm Beach
K. MISCELLANEOUS																	
1. Adm. Morbidity Service	36	34	138	116	69	35	13	69	2	13	229	87	253	19	75	20	339
2. Field and Office Visits—Morbidity	219	61	240	155	245	379	24	211	9	85	551	187	1,545	27	215	57	1,980
3. General Medical Examinations	4	50	42	24	216	2	9	257	404	0	5	43	93	0	12	12	288
4. Health Cards Issued	21	856	2,537	2,709	600	90	177	2,773	1,787	0	1,436	334	1,314	135	0	855	6,629
5. Visits in the Interest of Vital Statistics	4	11	13	3	9	13	8	12	49	8	12	22	20	1	25	3	571
6. Conferences or Visits in the Interest of Civil Defense	0	0	1	0	0	0	0	16	3	11	12	0	0	1	0	3	1
7. Visits in the Interest of reported accidents, including poisoning	0	0	0	0	2	0	0	0	12	0	1	0	0	0	94	0	47
M. NURSING HOMES																	
1. Number of Nursing Homes	0	10	3	2	1	0	0	6	2	1	0	0	0	1	17	10	18
2. Visits to Nursing Homes	0	22	21	14	5	0	0	65	13	3	0	0	0	8	253	89	125
P. SANITATION																	
1. Approved Water Supplies Installed, Private & Semi-Public	0	0	0	0	2	9	2	0	117	47	1	0	1	1	0	20	0
2. Approved Water Supplies Installed, New Public Water Connections	0	0	0	4	0	7	0	0	10	52	0	0	2	7	0	10	0
3. New Specification Privies Installed	0	0	0	0	0	0	0	16	8	0	0	8	0	0	3	0	5
4. Percolation Water Table or Soil Log Test	4	149	0	42	14	2	3	132	236	160	0	38	136	67	5,585	59	238
5. Subdivision Analysis	0	43	0	2	9	0	0	2	15	1	1	1	4	2	196	85	1
6. Pollution Survey	0	2	374	241	2	0	2	0	14	20	12	1	1	0	20	4	34
7. New Specification Septic Tanks Installed	5	913	384	498	71	14	12	1,231	292	190	57	94	293	94	5,068	209	2,331
8. Rabies—Number of Animal Bites Investigated	0	46	86	222	35	0	11	198	127	25	182	7	153	26	1,829	60	294
9. Field Visits for Rabies Investigation	2	96	114	953	58	0	19	427	33	104	239	32	133	27	1,937	96	62
10. Complaints Investigated	7	265	73	602	13	4	9	308	640	70	174	57	161	12	5,326	138	1,846
11. Nuisances Corrected	3	68	9	106	13	2	3	164	295	33	143	13	107	7	1,258	41	672
12-19. Field Visits	59	2,356	1,268	3,676	656	203	346	3,757	1,885	1,430	4,114	62	3,278	343	50,444	1,338	10,130

TABLE 6 (Continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1959

	Pasco	Pinellas	Polk	Putnam	St. Lucie	Santa Rosa	Sarasota	Seminole	Sumter	Suwannee	Taylor	Union	Volusia	Wakulla	Walton	Washington	Total for 1959
K. MISCELLANEOUS																	
1. Adm. Morbidity Service.....	51	800	522	338	3	134	121	35	57	155	46	110	153	12	204	2	8,160
2. Field and Office Visits—Morbidity.....	76	7,119	1,527	551	4	234	1,081	54	73	547	76	264	2,144	40	307	2	35,752
3. General Medical Examinations.....	37	300	167	95	0	82	176	2	6	17	2	82	2,063	14	175	98	11,921
4. Health Cards Issued.....	2,042	29,300	5,659	985	975	529	2,185	516	454	284	509	84	4,864	207	393	383	174,446
5. Visits in the Interest of Vital Statistics.....	7	0	42	2	12	6	79	14	6	3	3	18	74	8	9	1	2,381
6. Conferences or Visits in the Interest of Civil Defense.....	0	25	8	4	0	0	7	0	0	0	0	4	11	0	0	0	263
7. Visits in the Interest of reported accidents, including poisoning.....	1	5	13	0	0	0	97	3	0	0	0	0	2	2	0	0	893
M. NURSING HOMES																	
1. Number of Nursing Homes Admitted to Service.....	7	28	30	4	5	0	9	10	1	1	0	0	21	0	0	1	425
2. Visits to Nursing Homes.....	31	487	163	20	38	0	104	62	10	12	0	0	387	0	0	4	4,255
P. SANITATION																	
1. Approved Water Supplies Installed, Private & Semi-Public.....	4	4	4	13	2	0	126	27	0	0	1	1	0	2	1	2	4,047
2. Approved Water Supplies Installed, New Public Water Connections.....	0	1	0	6	43	0	10	7	0	0	12	0	0	0	12	0	9,982
3. New Specification Privies Installed.....	4	26	16	0	2	1	3	0	27	3	0	24	12	0	3	0	507
4. Percolation Water Table or Soil Log Test.....	61	4,647	1,635	83	493	20	803	576	12	74	9	0	375	6	0	0	25,769
5. Subdivision Analysis.....	0	1	86	0	1	1	49	53	0	18	0	0	93	2	0	0	1,598
6. Pollution Survey.....	0	12	23	0	2	8	14	4	0	0	4	0	5	0	0	0	1,109
7. New Specification Septic Tanks Installed.....	132	3,266	2,180	93	360	157	1,607	1,008	41	38	38	28	1,761	3	94	26	41,545
8. Rabies—Number of Animal Bites Investigated.....	3	407	491	32	86	52	225	74	42	8	12	6	195	4	17	28	15,049
9. Field Visits for Rabies Investigation.....	22	889	1,238	45	305	63	634	121	81	6	29	2	474	7	109	0	39,574
10. Complaints Investigated.....	59	2,838	1,688	83	179	66	599	265	31	12	37	9	401	14	190	18	34,345
11. Nuisances Corrected.....	17	735	475	52	184	9	260	123	32	11	13	4	203	10	43	13	17,415
12-19. Field Visits.....	293	30,268	7,326	669	4,749	2,034	5,566	1,260	659	310	475	787	6,212	117	772	36	325,695

TABLE 6 (Continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1959

	Alachua	Baker	Bay	Bradford	Brevard	Broward	Calhoun	Charlotte	Citrus	Clay	Collier	Columbia	Dade	DeSoto	Dixie	Duval	Duval Special Program
R. PROTECTION OF FOOD AND MILK																	
1. Food-handling Establishments Admitted to Service.....	307	29	366	69	352	1,382	19	57	16	116	44	46	5,764	17	16	782	
2. Field Visits to Food-handling Establishments.....	2,339	378	2,014	634	2,180	4,541	320	382	85	949	176	269	35,751	125	108	2,227	
3. Number of Food-handlers Certificates Awarded.....	1	0	0	0	1	23	0	0	0	71	0	0	2,102	0	0	0	
4. Dairy Farms Admitted to Service.....	17	3	5	4	46	0	12	1	0	0	0	8	84	3	0	0	
5. Field Visits to Dairy Farms.....	207	15	206	43	46	0	238	2	0	68	0	33	1,230	53	0	0	
6. Milk & Milk Products Plants Admitted to Service.....	2	0	17	4	5	1	0	1	0	2	0	2	99	0	0	0	
7. Field Visits to Milk & Milk Products Plants.....	56	0	34	32	21	76	0	3	0	20	0	16	3,452	0	0	0	
8. Cows Tuberculin Tested.....	2	27	104	0	0	297	0	0	0	30	0	0	6,368	389	0	0	
9. Cows Bangs Tested.....	0	0	104	40	0	0	0	0	0	80	0	0	0	462	0	0	
10. Dairy Farms under Mastitis Control Program.....	8	0	0	0	0	0	0	0	0	8	0	0	0	8	0	0	
V. HEALTH INFORMATION																	
1. Meetings Attended.....	699	41	64	90	608	347	58	27	84	267	270	10	1,985	20	9	132	
2. Lectures and Motion Pictures.....	569	23	180	15	128	186	61	55	61	93	71	3	1,194	44	29	66	
3. Showings.....	9	0	0	0	2	0	0	0	0	0	10	1	10	6	0	2	
4. Radio & Television Programs.....	11	31	0	13	2	1	1	15	9	55	8	3	65	23	21	2	
5. News Articles Published.....	5	0	10	0	9	1	1	1	0	10	1	0	5	2	2	0	
6. Exhibits Displayed.....																	
X. LABORATORY																	
1-21. Specimens Examined.....	8,464	1,923	6,891	1,824	9,688	23,100	1,275	1,876	962	1,607	3,781	3,378	76,804	2,179	2,266	21,291	

TABLE 6 (Continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1959

	Escambia	Flagler	Franklin	Gadsden	Gilchrist	Glades	Gulf	Hamilton	Hardee	Hendry	Hernando	Highlands	Hillsborough	Holmes	Indian River	Jackson	Jefferson
R. PROTECTION OF FOOD AND MILK																	
1. Food-handling Establishments Admitted to Service	465	86	29	86	5	37	98	29	26	64	21	149	2,805	98	25	146	40
2. Field Visits to Food-handling Establishments	3,950	862	241	400	132	51	999	71	100	104	53	398	31,198	503	163	1,559	266
3. Number of Food-handlers' Certificates Awarded	1,107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4. Dairy Farms Admitted to Service	64	1	0	8	0	5	1	1	3	7	2	4	101	36	6	35	8
5. Field Visits to Dairy Farms	829	3	0	227	0	58	13	22	42	15	3	46	2,494	312	62	411	55
6. Milk & Milk Products Plants Admitted to Service	5	0	0	2	0	0	0	0	0	0	0	4	62	1	3	3	1
7. Field Visits to Milk & Milk Products Plants	128	0	0	35	0	0	0	0	0	0	0	6	1,311	1	12	44	6
8. Cows Tuberculin Tested	3,323	0	0	345	0	0	38	0	279	0	0	0	19,151	678	448	654	713
9. Cows Bangs Tested	3,643	0	0	345	0	0	38	0	0	0	0	0	3,721	645	2	654	713
10. Dairy Farms under Mastitis Control Program	0	0	0	0	0	0	0	0	0	2	0	0	101	0	0	0	8
V. HEALTH INFORMATION																	
1. Meetings Attended	406	5	21	144	3	27	33	15	120	49	17	79	1,772	62	237	106	66
2. Lectures and Motion Pictures	577	2	16	147	8	1	50	8	49	16	16	11	697	46	35	173	131
3. Showings	0	0	0	0	0	0	85	0	0	0	0	2	12	12	44	0	0
4. Radio & Television Programs	53	10	3	64	1	6	9	13	3	18	3	14	68	17	5	0	5
5. News Articles Published	2	0	0	0	1	0	1	0	0	3	1	0	5	4	1	1	0
6. Exhibits Displayed																	
X. LABORATORY																	
1-21. Specimens Examined	27,074	1,057	1,216	5,063	430	909	1,603	2,153	2,988	2,817	665	2,366	107,974	2,163	3,102	5,547	1,000

TABLE 6 (Continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1959

	Lafayette	Lake	Lee	Leon	Levy	Liberty	Madison	Manatee	Marion	Martin	Monroe	Nassau	Okaloosa	Okechobee	Orange	Osceola	Palm Beach
R. PROTECTION OF FOOD AND MILK																	
1. Food-handling Establishments Admitted to Service	9	109	305	397	52	15	37	132	84	203	260	97	151	47	358	51	679
2. Field Visits to Food-handling Establishments	40	301	764	1,947	109	71	163	794	611	1,056	875	324	488	118	2,118	295	1,622
3. Number of Food-handlers' Certificates Awarded	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4. Dairy Farms Admitted to Service	21	12	5	11	1	0	9	23	17	6	0	0	0	17	1	13	127
5. Field Visits to Dairy Farms	343	22	82	79	8	0	158	206	211	88	0	0	27	170	2	68	270
6. Milk & Milk Products Plants Admitted to Service	0	1	2	5	1	0	2	2	10	3	8	0	1	0	1	0	30
7. Field Visits to Milk & Milk Products Plants	0	1	22	70	8	0	9	15	86	15	28	0	4	0	1	0	1,345
8. Cows Tuberculin Tested	1,129	620	582	2,521	0	0	865	1,563	0	1,874	0	0	117	6,599	0	0	24,993
9. Cows Bangs Tested	1,165	1,008	0	2,440	0	0	598	43	0	739	0	2	11	804	0	0	13,086
10. Dairy Farms under Mastitis Control Program	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	2
V. HEALTH INFORMATION																	
1. Meetings Attended	4	13	283	106	40	21	55	394	131	95	184	141	107	30	243	35	724
2. Lectures and Motion Pictures																	
3. Showings	3	12	89	85	104	8	66	204	56	91	187	96	98	19	992	27	458
4. Radio & Television Programs	0	0	0	38	0	0	5	11	2	8,181	1	10	10	14	0	1	0
5. News Articles Published	0	0	0	48	0	4	13	27	9	0	11	49	18	0	61	5	0
6. Exhibits Displayed	0	0	7	3	0	0	0	2	3	0	0	0	0	1	9	0	0
X. LABORATORY																	
1-21. Specimens Examined	631	3,280	7,623	20,562	2,067	969	2,411	8,196	6,567	1,797	5,595	3,532	4,071	908	14,616	2,808	29,123

TABLE 6 (Continued)
SOME MAJOR ACTIVITIES OF LOCAL HEALTH UNITS DURING 1959

	Pasco	Pinellas	Polk	Putnam	St. Lucie	Santa Rosa	Sarasota	Seminole	Sumter	Suwannee	Taylor	Union	Volusia	Walton	Washington	Total for 1959
R. PROTECTION OF FOOD AND MILK																
1. Food-handling Establishments	59	2,509	867	188	297	181	469	97	74	44	72	22	1,086	27	73	22,719
2. Admitted to Service	504	12,667	5,666	488	3,116	771	1,237	621	298	680	160	56	4,379	198	280	136,137
3. Establishments	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	3,435
4. Number of Food-handlers	16	26	47	3	6	25	10	2	7	6	0	0	22	0	15	12,804
5. Dairy Farms Admitted to Service	344	487	395	12	50	374	72	10	86	71	0	37	381	0	177	11,133
6. Field Visits to Dairy Farms	0	50	2	1	5	0	4	1	0	0	2	0	6	0	4	356
7. Milk & Milk Products Plants	0	780	21	2	50	0	25	1	0	0	2	0	195	0	35	1,969
8. Admitted to Service	2,862	5,412	4,447	0	2,069	0	32	0	327	111	0	214	0	0	2,197	91,966
9. Products Plants	161	5,411	1,048	0	95	1	0	0	319	100	0	113	0	0	1,194	44,209
10. Cows Tuberculin Tested	21	25	82	0	0	0	3	0	0	1	0	0	0	0	15	282
11. Dairy Farms under Mastitis Control Program																
V. HEALTH INFORMATION																
1. Meetings Attended	103	840	261	60	91	227	255	87	18	36	42	23	387	13	57	12,990
2. Lectures and Motion Pictures	13	1,061	648	8	50	28	148	84	24	5	82	7	118	35	61	9,730
3. Showings	0	42	9	0	0	0	0	0	0	0	0	0	0	0	0	3,524
4. Radio & Television Programs	1	103	74	0	0	19	73	4	20	4	12	9	34	0	9	1,261
5. News Articles Published	0	15	3	0	0	0	11	0	1	0	2	0	1	0	21	151
6. Exhibits Displayed																
X. LABORATORY																
1-21. Specimens Examined	2,551	50,966	24,182	3,618	3,395	4,032	3,407	2,190	2,695	1,641	1,567	1,015	8,127	1,802	2,863	1,822,571,165

BUREAU OF VITAL STATISTICS

EVERETT H. WILLIAMS, JR., M.S., Hyg.
Director

This bureau is responsible for records of birth, stillbirth, death, marriage, annulment of marriage, divorce, legal change of name and adoption. These records are required by state law and they serve two main purposes. First, they serve as a legal record of the event showing when, where and to whom it occurred. Copies of the original certificates, when properly certified, are specified by law as prima facie evidence of the facts stated thereon. Upon receipt of the required fee certified copies are issued to applicants who have a proper interest in the record.

The second purpose for recording vital events is their statistical value. Public health agencies are particularly interested in statistical data concerning births, stillbirths and deaths. Since public health personnel are the primary users of these data it is proper for the State Board of Health to have the legal responsibility for collecting and preserving the records.

COLLECTION

It is axiomatic that statistical data can be no better than the data on the original records. For this reason the collection of records is a most important phase of vital statistics. Completeness, accuracy and timeliness are the three factors which registrars must constantly strive to improve. The goal is to have a certificate filed for every event, to have accurate data on every certificate and to have every certificate filed within the time limit prescribed by law.

Marriages, annulments of marriage, divorces, legal changes of name and adoptions are reported by the county judges and clerks of circuit courts and very little difficulty is experienced in the collection of these records. Birth certificates should be reported within 10 days by the attendant at birth. Stillbirth and death certificates are the responsibility of the funeral director and must be filed before burial, removal from the county or before the expiration of 3 days. Because so many persons are involved, the collection of birth, stillbirth and death records is difficult. These records are filed with the local registrar, in each county and then forwarded to the state office. County health officers are the local registrars in all counties except St. Johns.

Local registrars are responsible for the proper filing of birth, stillbirth and death certificates within their county. Complete, accurate and timely registration of vital events does not just happen. Efficient registration is the result of conscientious effort on the part of registrars. One measurement of the relative efficiency of vital statistics registration in each county is shown in the "Vital Statistics Scoreboard" which is published annually (Table 13). The top 10 counties are to be congratulated on their superior performance. They are Glades, Duval, Hernando, Jefferson, Baker, Hillsborough, Dade, Orange, Citrus and Sarasota. The "Score-

board" shows that 93.7 per cent of all birth certificates and 97.2 per cent of all death certificates were filed and forwarded to the Bureau of Vital Statistics within the prescribed time limit. The steady improvement in this index of performance is gratifying.

Last year 215,624 current certificates were registered with the bureau, an increase of 5.5 per cent over the preceding year. Processing each of these records includes the following: check to see that certificate is properly completed, return those which do not meet minimum standards, query others which are not complete or have inconsistent or erroneous data, code for statistics, put in proper order for permanent filing, number, keypunch for indexing and statistics, microfilm, bind and send to vault for permanent storage.

INDEXING

The re-indexing project for old records which was started several years ago is progressing slowly. No personnel are available for full time work on this project, so it is being done as a spare time job whenever current work is completed. These revised indexes when completed will result in shortening searching procedures and will facilitate the training of new employees.

CERTIFICATIONS

The issuance of certified copies is another of the large-volume jobs performed by the bureau. Last year 107,272 requests for certification were received and processed. The volume of requests received has remained fairly constant for the past 4 years. This is probably due to the fact that more County Health Departments are beginning to issue certified copies of records and certifications are obtained at the county level rather than from the State Board of Health. The bureau was again able to process all routine requests within 24 hours after receipt. It is always gratifying to be able to give prompt service.

AMENDMENTS

The amendment of records is another of the major functions of this bureau and is most complex. In every case the applicant must submit evidence to substantiate his request. Each case must be adjudicated by bureau personnel and processed only when sufficient evidence has been submitted. In this respect the bureau acts as a quasi-judicial agency. A wide variety of requests are received each year under the following broad categories: Adoption, legitimation, change of parentage, legal change of name, correction of date of birth, correction of race or sex, correction of spelling, correction of parent's age and others.

DELAYED REGISTRATION OF BIRTH

Although births are required by law to be registered within 10 days after occurrence, a certificate is accepted on the current form if filed by the attendant at birth prior to the child's fourth birthday. After the fourth birthday only a "Delayed Birth Certificate" can be filed. This must be accompanied by documentary evidence which is sufficient to substantiate the person's name, parentage, date and place of birth. Every effort is made to see that evidence requirements are strong enough to minimize the establishment of fraudulent records and at the same time permit applicants to obtain sufficient evidence with a minimum of effort. In some cases it is most difficult to explain to the applicant why there is so much "red tape" involved in filing a delayed birth record. Last year a total of 3264 births were registered in this fashion.

BUREAU REORGANIZATION

On July 1, that portion of the bureau which deals with data processing was transferred to Administration to become a service unit for all bureaus and divisions.

POPULATION

The population of the state as of July 1, 1959 was estimated to be 4,610,600, an increase of 3.6 per cent over the figure of 4,448,000 for the previous year. The white population was estimated to be 3,727,400 persons and the nonwhite population 883,200.

STATISTICS

This report contains only a brief summary of statistical data for the year. An analysis of vital statistics data for 1959 in greater detail is presented in Supplement 1 of this report under the title FLORIDA VITAL STATISTICS, 1959. Because of the time lag in receipt of records, figures for births and deaths in this report are labeled "preliminary". Final figures are contained in the above mentioned supplement, and Tables 9a, 10a and 11a contain figures for 1958.

BIRTHS

The preliminary birth figure for 1959 is 112,826 compared with the 108,014 (final figure) in 1958. White births increased from 78,125 in 1958 to 82,034 and the nonwhite increased from 29,889 to 30,792 in 1959. This gives estimated birth rates (per 1000 population) for 1959 of 24.5 for total births, 22.0 for white and 34.9 for nonwhite, compared with the final rates per 1000 population in 1958 of 24.3, 21.7 and 35.4 respectively.

DEATHS

Preliminary tabulations for 1959 give a total of 44,162 deaths with 35,531 white and 8631 nonwhite, compared with a total of 43,353 in 1958 with 34,540 white and 8813 nonwhite. However, the rate per 1000 population dropped from 9.7 in 1958 to 9.6 in 1959. The rates per 1000 population for the white race decreased from 9.6 in 1958 to 9.5 in 1959 while the nonwhite rate declined from 10.4 to 9.8. The 10 leading causes remained much the same, but it is interesting to note that some of the rates indicate a decline. The rate per 100,000 population reflects a decline for diseases of the heart from 343.5 in 1958 to 332.7 in 1959, while cerebral vascular disease declined from 115.1 to 110.5. The rate of all accidents declined from 62.9 to 59.5 per 100,000, and the influenza and pneumonia rate dropped from 32.6 to 26.9. The cancer rate per 100,000 population increased from 149.3 to 156.6, and diseases of early infancy increased from 45.7 to 46.6. These leading 6 causes have retained this position during the past decade. The remaining 4 of the 10 leading causes changed as general arteriosclerosis moved into seventh place with a rate of 14.8 per 100,000 population in 1959 compared with 13.6 in 1958. Congenital malformations moved from eleventh place in 1958 with a rate of 11.9 to eighth place and a rate of 13.1 in 1959. Diabetes Mellitus dropped from seventh to ninth place with a rate per 100,000 population of 13.7 in 1958 and 12.9 in 1959. Suicides dropped into tenth place with a rate of 12.4 per 100,000.

MARRIAGES, DIVORCES AND ANNULMENTS

Preliminary tabulations indicate that marriages increased from 34,569 in 1958 to 38,595 in 1959, an increase of 11.6 per cent. The rate per 1000 population increased from 7.8 in 1958 to 8.4 in 1959. Divorces and annulments also increased from 17,604 in 1958 to 19,544 in 1959. This indicates a slight increase in the rate per 1000 population from 4.0 in 1958 to 4.2 in 1959.

TABLE 7
ACTIVITIES OF THE BUREAU OF VITAL STATISTICS
DURING THE YEARS 1958 AND 1959

ACTIVITY	1958	1959	PER CENT CHANGE
Current certificates filed.....	204,412	215,624	+ 5.5
Delayed birth certificates filed.....	3,542	3,264	- 7.8
Adoption decrees received.....	4,530	3,904	- 13.2
Amended certificates filed for adoptions.....	3,292	3,404	+ 3.4
Amended certificates filed for legitimations and correction of parentage.....	992	926	- 6.7
Requests for certifications:			
Total.....	108,050	107,252	- 0.7
Fee paid.....	87,290	86,700	- 0.7
Free.....	20,760	20,572	- 0.9
Photostats made.....	122,550	133,140	+ 8.6
Birth registration cards made.....	21,937	22,036	+ 0.5
Fees collected and transmitted to State Treasurer.....	\$132,242.99	\$137,636.33	+ 4.1

TABLE 8
RESIDENT BIRTHS AND DEATHS WITH RATES PER 1,000
POPULATION, FLORIDA, 1931-1959

YEAR	POPULATION	BIRTHS	BIRTH RATE	DEATHS	DEATH RATE
1959*	4,610,600	112,826	24.5	44,162	9.6
1958	4,448,000	108,014	24.3	43,353	9.7
1957	4,250,400	103,806	24.4	39,937	9.4
1956	3,897,400	97,320	25.0	36,705	9.4
1955	3,643,562	89,112	24.5	33,295	9.1
1954	3,481,528	84,831	24.4	31,503	9.0
1953	3,111,100	80,087	25.7	30,529	9.8
1952	3,006,400	74,219	29.7	29,136	9.7
1951	2,901,800	70,431	24.3	27,857	9.6
1950	2,797,100	64,370	23.0	26,525	9.5
1949	2,692,500	61,642	22.9	25,317	9.4
1948	2,587,800	59,685	23.1	24,505	9.5
1947	2,483,200	60,201	24.2	24,150	9.7
1946	2,378,500	54,347	22.8	22,750	9.6
1945	2,273,900	48,839	21.5	22,594	9.9
1944	2,196,195	49,186	22.4	23,251	10.6
1943	2,125,935	46,783	22.0	23,213	10.9
1942	2,055,675	40,675	19.8	21,144	10.3
1941	1,985,415	37,351	18.8	21,438	10.8
1940	1,915,155	33,696	17.6	21,458	11.2
1939	1,853,660	32,437	17.5	20,209	10.9
1938	1,795,322	31,101	17.3	19,949	11.1
1937	1,736,984	29,529	17.0	19,825	11.4
1936	1,678,646	28,116	16.7	20,050	11.9
1935	1,620,308	28,058	17.3	19,059	11.8
1934	1,585,596	26,722	16.9	19,518	12.3
1933	1,554,000	25,647	16.5	18,112	11.7
1932	1,530,356	27,242	17.8	17,721	11.6
1931	1,502,736	26,789	17.8	17,291	11.5

*1959 data based upon preliminary totals

DEATHS

Preliminary tabulations for 1959 give a total of 44,162 deaths with 35,531 white and 8631 nonwhite, compared with a total of 43,353 in 1958 with 34,540 white and 8813 nonwhite. However, the rate per 1000 population dropped from 9.7 in 1958 to 9.6 in 1959. The rates per 1000 population for the white race decreased from 9.6 in 1958 to 9.5 in 1959 while the nonwhite rate declined from 10.4 to 9.8. The 10 leading causes remained much the same, but it is interesting to note that some of the rates indicate a decline. The rate per 100,000 population reflects a decline for diseases of the heart from 343.5 in 1958 to 332.7 in 1959, while cerebral vascular disease declined from 115.1 to 110.5. The rate of all accidents declined from 62.9 to 59.5 per 100,000, and the influenza and pneumonia rate dropped from 32.6 to 26.9. The cancer rate per 100,000 population increased from 149.3 to 156.6, and diseases of early infancy increased from 45.7 to 46.6. These leading 6 causes have retained this position during the past decade. The remaining 4 of the 10 leading causes changed as general arteriosclerosis moved into seventh place with a rate of 14.8 per 100,000 population in 1959 compared with 13.6 in 1958. Congenital malformations moved from eleventh place in 1958 with a rate of 11.9 to eighth place and a rate of 13.1 in 1959. Diabetes Mellitus dropped from seventh to ninth place with a rate per 100,000 population of 13.7 in 1958 and 12.9 in 1959. Suicides dropped into tenth place with a rate of 12.4 per 100,000.

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Amended certificates filed for legitimations and correction of parentage	992	926	- 6.7
Requests for certifications:			
Total	108,050	107,252	- 0.7
Fee paid	87,290	86,700	- 0.7
Free	20,760	20,572	- 0.9
Photostats made	122,550	133,140	+ 8.6
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POPULATION, FLORIDA, 1931-1959

YEAR	POPULATION	BIRTHS	BIRTH RATE	DEATHS	DEATH RATE
1959*	4,610,600	112,826	24.5	44,162	9.6
1958	4,448,000	108,014	24.3	43,353	9.7
1957	4,250,400	103,806	24.4	39,937	9.4
1956	3,897,400	97,320	25.0	36,705	9.4
1955	3,643,562	89,112	24.5	33,295	9.1
1954	3,481,528	84,831	24.4	31,503	9.0
1953	3,111,100	80,087	25.7	30,529	9.8
1952	3,006,400	74,219	29.7	29,136	9.7
1951	2,901,800	70,431	24.3	27,857	9.6
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1949	2,692,500	61,642	22.9	25,317	9.4
1948	2,587,800	59,685	23.1	24,505	9.5
1947	2,483,200	60,201	24.2	24,150	9.7
1946	2,378,500	54,347	22.8	22,750	9.6
1945	2,273,900	48,839	21.5	22,594	9.9
1944	2,196,195	49,186	22.4	23,251	10.6
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1942	2,055,675	40,675	19.8	21,144	10.3
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1937	1,736,984	29,529	17.0	19,825	11.4
1936	1,678,646	28,116	16.7	20,050	11.9
1935	1,620,308	28,058	17.3	19,059	11.8
1934	1,585,596	26,722	16.9	19,518	12.3
1933	1,554,000	25,647	16.5	18,112	11.7
1932	1,530,356	27,242	17.8	17,721	11.6
1931	1,502,786	26,789	17.8	17,291	11.5

*1959 data based upon preliminary totals

TABLE 9
RESIDENT DEATHS AND DEATH RATES BY CAUSE, BY RACE, FLORIDA, 1959 (PRELIMINARY)

CAUSE OF DEATH (Numbers in parentheses refer to the International List of Causes of Death)	DEATHS			Rate per 100,000 Population		
	Total	White	Nonwhite	Total	White	Nonwhite
TOTAL DEATHS	44,162	35,531	8,631	9.5*	9.5*	9.8*
Tuberculosis of respiratory system (001-008)	210	153	57	4.6	4.1	6.5
Tuberculosis, other forms (010-019)	16	8	8	.3	.2	.9
Syphilis and its sequelae (020-029)	100	50	50	2.2	1.3	5.7
Typhoid fever (040)	0	0	0	—	—	—
Dysentery, all forms (045-048)	9	2	7	.2	.1	.8
Diphtheria (055)	5	1	4	.1	.0	.6
Meningococcal infections (057)	14	8	6	.3	.2	.7
Acute poliomyelitis (080)	12	12	0	.3	.3	—
Acute infectious encephalitis (082)	21	14	7	.5	.4	.8
Measles (085)	11	3	8	.2	.1	.9
Typhus and other rickettsial diseases (100-108)	0	0	0	—	—	—
All other diseases classified as infective & parasitic (030-138) with exception of above causes	178	105	73	3.9	2.8	8.3
Malignant neoplasms, including neoplasms of lymphatic & hematopoietic tissues (140-205)	7,219	6,310	909	156.6	169.3	102.9
Diabetes mellitus (260)	693	463	130	12.9	12.4	14.8
Anemia (290-293)	115	71	44	2.5	1.9	5.0
Major cardiovascular-renal disease	22,437	18,987	3,450	486.6	509.4	390.6
Cerebral vascular disease (330-334)	5,094	3,971	1,123	110.5	106.5	127.2
Rheumatic fever (400-402)	27	15	12	.6	.4	1.4
Diseases of the heart	15,340	13,419	1,921	332.7	360.0	217.5
Chronic rheumatic heart disease (410-416)	451	407	44	9.8	10.9	5.0
Arteriosclerotic heart disease, coronary disease (420)	11,582	10,591	991	251.2	284.1	112.2
Nonrheumatic chronic endocarditis & myocardial degeneration (421, 422)	1,031	833	198	22.4	22.3	22.4
Hypertension with heart disease (440-443)	1,437	914	523	31.2	24.5	59.2
Other diseases of heart (430-434)	839	674	165	18.2	18.1	18.7
Hypertension without heart disease (444-447)	346	230	116	7.5	6.2	13.1
General arteriosclerosis (450-459)	683	615	68	14.8	16.5	7.7
Other circulatory disease (461-468)	610	525	85	13.2	14.1	9.6
Chronic and unspecified nephritis (592-594)	337	212	125	7.3	5.7	14.2
Influenza (480-483)	65	28	37	1.4	.8	4.2
Pneumonia (490-493)	1,173	783	390	25.4	21.0	44.2
Ulcer of stomach and duodenum (540-541)	267	226	41	5.8	6.1	4.6
Intestinal obstruction and hernia (560, 561, 570)	240	189	51	5.2	5.1	6.8
Gastritis, duodenitis, enteritis & colitis, except diarrhea of the newborn (543, 571, 572)	332	172	160	7.2	4.6	18.1
Cirrhosis of liver (581)	532	468	64	11.5	12.6	7.2
Acute nephritis and nephrosis (590, 591)	57	35	22	1.3	.9	2.8
Complications of pregnancy, childbirth & the puerperium (640-652, 660, 670-689)	17	17	0	0.1**	0.1**	18.0**
Birth injuries, postnatal asphyxia & atelectasis (760-762)	922	456	466	13.1	12.2	16.5
Infection of the newborn (763-768)	609	313	296	16.3	16.3	35.4
Other diseases peculiar to early infancy and immaturity unqualified (769-776)	183	87	96	4.0	2.3	10.9
Symptoms, senility, and ill-defined causes (780-795)	1,043	635	408	22.6	17.0	46.2
All other diseases (residual)	938	582	356	20.3	15.6	40.3
Motor vehicle accidents (810-835)	2,987	2,311	676	64.8	62.0	76.5
All other accidents (800-802, 840-962)	1,112	892	220	24.1	23.9	24.9
Suicide & self-inflicted injury (963, 970-979)	1,633	1,153	480	35.4	30.9	54.8
Homicide (964, 965, 980-999)	570	550	20	12.4	14.8	2.3
Infant mortality (deaths under one year of age)	506	151	355	11.0	4.1	40.2
	3,537	2,046	1,491	81.3***	24.9***	48.4***

**Rate per 1,000 population

***Rate per 10,000 live births

***Rate per 1,000 live births

TABLE 9-A
RESIDENT DEATHS AND DEATH RATES BY CAUSE, BY RACE, FLORIDA, 1958 (FINAL FIGURES)

CAUSE OF DEATH (Numbers in parentheses refer to the International List of Causes of Death)	DEATHS			Rate per 100,000 Population		
	Total	White	Nonwhite	Total	White	Nonwhite
TOTAL DEATHS	43,353	34,540	8,813	9.7*	9.6*	10.4*
Tuberculosis of respiratory system (001-008)	259	182	77	5.8	5.1	9.1
Tuberculosis, other forms (010-019)	28	11	17	0.6	0.3	2.0
Syphilis and its sequelae (020-029)	101	50	51	2.3	1.4	6.0
Typhoid fever (040)	0	0	0	—	—	—
Dysentery, all forms (045-048)	11	3	8	0.2	0.1	0.9
Scarlet fever & strep. sore throat (050, 051)	5	3	2	0.1	0.1	—
Diphtheria (055)	2	1	1	0.0	0.0	0.1
Meningococcal infections (057)	24	16	8	0.5	0.4	0.9
Acute poliomyelitis (080)	16	9	7	0.1	0.1	0.7
Acute infectious encephalitis (082)	12	11	1	0.3	0.3	0.1
Measles (085)	0	0	0	—	—	—
Typhus & other rickettsial diseases (100-108)	192	120	72	4.3	3.3	8.5
All other diseases classified as infective & parasitic (030-138) with exception of above causes	6,639	5,725	914	149.3	158.9	108.2
Malignant neoplasms, including neoplasms of lymphatic & hematopoietic tissues (140-205)	120	91	29	2.7	2.5	3.4
Diabetes mellitus (260)	611	470	141	13.7	13.0	16.7
Anemia (290-293)	99	66	33	2.2	1.8	3.9
Major cardiovascular-renal disease	22,199	18,572	3,627	499.1	515.4	429.3
Cerebral vascular disease (330-334)	5,120	3,975	1,145	115.1	110.3	136.5
Rheumatic fever (400-402)	15	10	5	0.3	0.3	0.6
Diseases of the heart (410-443)	15,280	13,212	2,068	343.5	366.7	244.8
Chronic rheumatic heart disease (410-416)	481	410	71	10.8	11.4	8.4
Arteriosclerotic heart disease, coronary disease (420)	11,240	10,260	980	252.7	284.8	116.0
Nonrheumatic chronic endocarditis & myocardial degeneration (421-422)	1,137	883	254	25.6	24.5	30.1
Hypertension with heart disease (440-443)	1,648	1,077	571	37.1	29.9	67.5
Other diseases of heart (430-434)	774	582	192	17.4	16.2	22.7
Hypertension without heart disease (444-447)	300	210	90	6.9	5.8	11.2
General arteriosclerosis (450)	604	511	93	13.6	14.2	11.0
Other circulatory disease (461-468)	520	432	88	11.7	12.0	10.4
Chronic and unspecified nephritis (592-594)	355	222	133	8.0	6.2	15.7
Influenza (480-483)	157	74	83	3.5	2.1	9.8
Pneumonia (490-493)	1,291	877	414	29.0	24.3	49.0
Brucellosis (500-502)	101	73	28	2.3	2.0	3.3
Ulcer of stomach & duodenum (540, 541)	281	246	35	6.3	6.8	4.1
Appendicitis (550-553)	49	35	14	1.1	1.0	1.7
Intestinal obstruction & hernia (560, 561, 570)	242	193	49	5.4	5.4	5.8
Gastritis, duodenitis, enteritis & colitis except diarrhea of the newborn (543, 571, 572)	278	147	131	6.2	4.1	15.5
Cirrhosis of liver (581)	555	488	67	12.5	13.5	7.9
Acute nephritis (590-591)	54	30	24	1.2	0.9	2.8
Hyperplasia of prostate (610)	116	97	19	2.6	2.7	13.4**
Complications of pregnancy, childbirth & the puerperium (640-652, 660, 670-689)	63	63	0	0.8**	0.8**	16.1
Birth injuries, postnatal asphyxia & atelectasis (760-762)	528	400	128	11.9	11.1	16.1
Infection of the newborn (763-768)	911	564	347	20.5	16.7	41.1
Other diseases peculiar to early infancy and immaturity unqualified (769-776)	166	77	89	3.7	2.1	10.6
Symptoms, senility, and ill-defined causes (780-795)	949	578	371	21.5	16.0	44.9
All other diseases (residual)	2,452	1,919	533	55.1	53.8	68.1
Motor vehicle accidents (810-835)	1,149	898	251	25.8	24.9	29.7
All other accidents (800-802, 840-962)	1,650	1,175	475	37.1	32.6	56.2
Suicide & self-inflicted injury (963, 970-979)	802	577	225	18.5	16.0	3.0
Homicide (964, 965, 980-999)	476	162	314	10.7	4.5	87.2
Infant mortality (deaths under one year of age)	3,425	1,924	1,501	31.7***	24.6***	50.2***

*Rate per 1,000 population

**Rate per 10,000 live births

***Rate per 1,000 live births

TABLE 10

ESTIMATED POPULATION AND PRELIMINARY TOTALS OF
BIRTHS, DEATHS, AND INFANT DEATHS,
BY RACE, BY COUNTY, FLORIDA, 1959

COUNTY	Population Estimate 1959	BIRTHS			DEATHS			INFANT DEATHS		
		Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite
STATE.....	4,610,600*	112,826	82,034	30,792	44,162	35,531	8,631	3,537	2,046	1,491
Alachua.....	81,600	1,995	1,347	648	533	335	198	67	37	30
Baker.....	6,800	192	139	53	55	37	18	4	2	2
Bay.....	65,400	2,124	1,747	377	412	337	75	61	41	20
Bradford.....	12,900	305	204	101	128	99	29	11	7	4
Brevard.....	101,500	3,102	2,603	499	598	494	104	79	57	22
Broward.....	280,800	6,882	4,562	2,320	2,562	2,080	482	208	88	120
Calhoun.....	8,000	181	144	37	75	64	11	7	4	3
Charlotte.....	9,300	194	176	18	123	118	5	6	5	1
Citrus.....	7,700	157	109	48	100	83	17	5	3	2
Clay.....	18,800	581	487	94	138	111	27	20	18	2
Collier.....	15,800	373	305	68	131	93	38	16	8	8
Columbia.....	19,700	542	334	208	227	148	79	21	16	5
Dade.....	855,800	19,217	14,203	5,014	8,023	6,999	1,024	552	341	211
DeSoto.....	11,400	238	146	92	113	76	37	11	2	9
Dixie.....	4,300	139	109	30	30	25	5	2	2	0
Duval.....	437,100	12,399	8,861	3,538	3,679	2,439	1,240	411	231	180
Escambia.....	167,600	5,350	3,918	1,432	1,183	808	375	178	100	78
Flagler.....	5,700	137	67	70	49	33	16	3	2	1
Franklin.....	6,100	173	138	35	83	59	24	3	3	0
Gadsden.....	47,000	1,097	276	821	350	118	232	64	6	58
Gilchrist.....	3,000	64	48	16	14	12	2	0	0	0
Glades.....	3,300	68	41	27	29	14	15	3	0	3
Gulf.....	10,000	265	187	78	63	36	27	6	3	3
Hamilton.....	7,900	219	99	120	94	53	41	8	4	4
Hardee.....	13,500	286	250	36	107	103	4	5	4	1
Hendry.....	7,400	229	135	94	77	45	32	12	5	7
Hernando.....	10,800	290	184	106	105	74	31	9	4	5
Highlands.....	18,500	537	351	186	234	187	47	38	22	16
Hillsborough.....	373,900	9,373	7,549	1,824	3,709	3,085	624	279	199	80
Holmes.....	11,800	212	198	14	113	107	6	3	3	0
Indian River.....	23,400	566	356	210	263	207	56	28	12	16
Jackson.....	37,000	804	503	301	333	206	127	23	10	13
Jefferson.....	9,600	271	78	193	110	47	63	16	2	14
Lafayette.....	2,400	51	40	11	24	20	4	1	1	0
Lake.....	52,800	1,174	822	352	633	525	108	41	29	12
Lee.....	45,600	1,272	941	331	452	358	94	36	17	19
Leon.....	79,500	1,896	1,161	735	480	255	225	48	21	27
Levy.....	10,100	212	109	103	106	70	36	7	4	3
Liberty.....	3,000	77	56	21	37	29	8	1	0	1
Madison.....	14,000	390	177	213	125	65	60	16	8	8
Manatee.....	57,800	1,112	758	354	852	727	125	49	29	20
Marion.....	49,100	1,280	695	585	534	330	204	36	17	19
Martin.....	15,200	369	220	149	178	134	44	19	11	8
Monroe.....	54,000	1,378	1,236	142	302	245	57	38	38	0
Nassau.....	15,500	441	310	131	134	79	55	19	12	7
Okaloosa.....	57,700	1,947	1,769	178	254	223	31	57	47	10
Okeechobee.....	5,400	158	130	28	50	38	12	6	4	2
Orange.....	246,600	6,539	5,200	1,339	1,982	1,695	287	159	112	47
Osceola.....	18,300	377	310	67	266	248	18	10	6	4
Palm Beach.....	223,500	4,944	3,192	1,752	2,091	1,637	454	168	74	94
Pasco.....	31,500	647	530	117	407	374	33	21	16	5
Pinellas.....	323,100	5,576	4,366	1,210	5,076	4,777	299	159	104	55
Polk.....	180,000	4,337	3,166	1,171	1,639	1,314	325	151	92	59
Putnam.....	33,400	843	510	333	321	206	115	23	11	17
St. Johns.....	32,500	633	375	258	341	241	100	28	5	23
St. Lucie.....	34,700	982	477	505	353	229	124	45	12	33
Santa Rosa.....	25,500	914	839	75	155	134	21	25	20	5
Sarasota.....	61,100	1,242	1,007	235	816	735	81	39	26	13
Seminole.....	51,200	1,392	943	449	433	276	157	39	22	17
Sumter.....	12,300	291	166	125	127	92	35	13	4	9
Suwannee.....	14,100	327	202	125	167	110	57	14	4	10
Taylor.....	14,500	365	272	93	130	87	43	12	7	5
Union.....	8,900	102	72	30	44	30	14	7	5	2
Volusia.....	113,100	2,356	1,649	707	1,515	1,275	240	66	31	35
Wakulla.....	5,300	105	58	47	40	27	13	2	1	1
Walton.....	14,300	315	267	48	150	128	22	11	11	0
Washington.....	11,200	220	155	65	105	86	19	7	4	3

*Includes State Institutions.

TABLE 10-A

ESTIMATED POPULATION AND TOTALS OF RESIDENT BIRTHS,
DEATHS, AND INFANT DEATHS, BY RACE,
BY COUNTY, FLORIDA, 1958
(Final Figures)

COUNTY	Population Estimate 1958	BIRTHS			DEATHS			INFANT DEATHS		
		Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite
STATE...	4,448,000*	108,014	78,125	29,889	43,353	34,540	8,813	3,425	1,924	1,501
Alachua.....	80,500	1,921	1,270	651	553	296	257	53	22	31
Baker.....	6,800	222	158	64	52	35	17	7	2	5
Bay.....	63,600	2,109	1,759	350	390	300	90	70	52	18
Bradford.....	12,200	316	209	107	132	100	32	8	6	2
Brevard.....	86,200	2,748	2,300	448	588	483	105	74	53	21
Broward.....	265,900	6,362	4,191	2,171	2,386	1,894	492	203	94	109
Calhoun.....	7,800	183	133	50	70	64	6	5	3	2
Charlotte.....	7,200	130	114	16	101	90	11	3	3	0
Citrus.....	8,400	167	118	49	117	94	23	7	4	3
Clay.....	19,700	526	451	75	130	102	28	20	15	5
Collier.....	13,900	380	310	70	112	85	27	17	13	4
Columbia.....	18,600	460	267	193	189	108	81	15	4	11
Dade.....	846,800	19,163	14,138	5,025	7,886	6,886	1,000	573	348	225
DeSoto.....	11,600	213	139	74	101	78	23	4	2	2
Dixie.....	4,400	109	95	14	45	32	13	0	0	0
Duval.....	427,200	11,829	8,431	3,398	3,578	2,418	1,160	322	194	128
Escambia.....	166,400	5,390	4,008	1,382	1,226	827	399	179	86	98
Flagler.....	5,300	151	70	81	54	31	23	12	4	8
Franklin.....	5,700	158	109	49	67	42	25	6	3	3
Gadsden.....	50,100	1,115	293	822	339	113	226	60	10	50
Gilchrist.....	3,300	61	51	10	30	28	2	1	1	0
Glades.....	3,100	54	30	24	24	14	10	3	0	3
Gulf.....	8,900	264	174	90	72	51	21	9	4	5
Hamilton.....	8,300	210	74	136	81	44	37	9	2	7
Hardee.....	13,600	256	219	37	125	113	12	15	12	3
Hendry.....	7,200	175	101	74	55	35	20	10	6	4
Hernando.....	9,800	284	181	103	112	85	27	12	5	7
Highlands.....	17,400	457	291	166	243	183	60	17	9	8
Hillsborough.....	359,300	8,888	7,150	1,738	3,558	2,969	589	287	199	88
Holmes.....	11,600	218	208	10	109	102	7	0	0	0
Indian River.....	23,100	525	321	204	243	192	51	22	9	13
Jackson.....	34,100	865	528	337	297	183	114	24	12	12
Jefferson.....	9,500	245	57	188	118	44	74	12	2	10
Lafayette.....	2,800	45	33	12	26	23	3	8	2	1
Lake.....	52,200	1,079	737	342	595	484	111	38	21	17
Lee.....	40,800	902	636	266	441	335	106	41	25	16
Leon.....	78,000	1,899	1,122	777	481	269	222	67	30	37
Levy.....	9,900	238	128	110	121	61	60	6	0	6
Liberty.....	2,800	77	60	17	24	19	5	3	3	0
Madison.....	14,200	358	156	202	165	81	84	17	6	11
Manatee.....	56,300	1,121	770	351	773	662	111	42	19	23
Marion.....	47,500	1,165	615	550	543	827	216	33	13	20
Martin.....	18,100	359	221	138	167	122	45	17	7	10
Monroe.....	54,000	1,417	1,259	158	276	229	47	28	16	12
Nassau.....	14,900	480	336	144	130	84	46	13	6	7
Okaloosa.....	56,500	1,941	1,782	159	266	236	30	53	43	10
Okeechobee.....	5,100	149	108	41	56	38	18	6	4	2
Orange.....	237,600	5,688	4,501	1,187	2,088	1,769	319	149	112	37
Osceola.....	16,300	298	241	57	292	258	34	10	6	4
Palm Beach.....	214,300	4,884	3,260	1,624	2,134	1,615	519	182	70	112
Pasco.....	30,800	619	496	123	409	372	37	14	8	6
Pinellas.....	296,100	5,182	3,996	1,186	4,914	4,573	341	177	104	73
Polk.....	176,000	4,256	3,130	1,126	1,547	1,250	297	123	73	50
Putnam.....	33,500	867	509	358	383	218	165	47	21	26
St. Johns.....	31,300	674	410	264	314	195	119	24	10	14
St. Lucie.....	33,600	997	494	503	350	241	109	42	16	28
Santa Rosa.....	25,200	837	758	79	188	164	24	25	20	5
Sarasota.....	59,000	1,151	905	246	764	689	75	31	19	12
Seminole.....	46,200	1,197	762	435	404	246	158	58	27	31
Sumter.....	11,500	272	167	105	98	69	29	6	3	3
Suwanee.....	14,100	337	213	124	166	113	53	13	7	6
Taylor.....	14,000	331	239	92	107	68	39	11	5	6
Union.....	10,600	97	59	38	52	35	17	4	1	3
Volusia.....	102,100	2,262	1,572	690	1,575	1,332	243	68	39	29
Wakulla.....	5,100	132	81	51	60	39	21	6	3	3
Walton.....	14,200	322	262	60	150	121	29	4	4	4
Washington.....	10,900	227	159	68	111	92	19	5	2	3

TABLE 11

PRELIMINARY TOTALS OF RESIDENT DEATHS FROM CERTAIN CAUSES, BY COUNTY, FLORIDA, 1959

COUNTIES	Maternal Deaths	Tuberculosis	Syphilis	Dysentery (All Forms)	Acute Poliomyelitis	Malignant Neoplasms (Cancer)	Diabetes	Anemias	Influenza & Pneumonia	Cardio-Vascular-Renal Diseases				Motor Vehicle Accidents	Other Accidents
										*Cerebral Vascular Disease	Heart Disease	Chronic Nephritis	All Other C.V. R. Disease		
STATE.....	57	226	100	9	12	7,219	593	115	1,238	5,094	15,340	337	1,666	1,112	1,633
Alachua.....	0	0	0	0	0	71	3	1	17	81	158	6	19	13	23
Baker.....	0	0	0	0	0	3	1	0	4	6	13	1	2	2	4
Bay.....	0	0	0	0	1	66	1	1	16	49	116	1	12	12	25
Bradford.....	1	3	0	0	0	20	2	0	3	18	45	0	3	2	4
Brevard.....	0	3	2	0	0	85	7	1	23	53	190	3	20	28	29
Broward.....	4	8	8	1	0	473	7	76	259	870	28	90	71	102	
Calhoun.....	0	0	0	0	0	9	2	0	2	14	29	0	1	3	5
Charlotte.....	0	0	0	0	0	19	2	1	4	14	48	0	6	4	3
Citrus.....	0	0	0	0	0	14	0	0	0	12	33	0	8	3	8
Clay.....	0	0	0	0	0	15	2	1	6	20	42	0	5	7	8
Collier.....	0	0	0	0	0	18	2	0	5	20	29	2	2	3	10
Columbia.....	0	2	1	0	0	29	8	0	9	34	65	0	8	7	13
Dade.....	9	53	23	3	3	1,515	129	18	239	645	2,871	40	308	190	263
DeSoto.....	0	1	0	0	0	20	2	2	3	15	39	3	1	5	6
Dixie.....	1	1	0	0	0	6	1	0	2	4	7	0	3	3	1
Duval.....	3	36	13	0	0	520	47	10	100	480	1,109	32	150	112	144
Escambia.....	4	9	3	0	1	151	11	7	47	122	369	8	24	37	66
Flagler.....	0	0	0	0	0	4	1	0	0	10	17	1	4	0	2
Franklin.....	0	1	1	0	0	12	1	1	3	15	29	0	5	0	3
Gadsden.....	2	2	0	1	0	31	5	1	20	50	115	1	14	8	15
Gilchrist.....	0	0	0	0	0	1	0	0	0	5	6	0	0	1	0
Glades.....	0	1	0	0	0	5	0	0	1	4	7	1	1	1	2
Gulf.....	0	0	1	0	0	7	1	0	2	3	22	0	4	0	6
Hamilton.....	1	0	0	0	0	18	0	1	1	9	34	1	3	0	10
Hardee.....	0	1	1	0	0	19	1	0	2	9	41	2	4	0	7
Hendry.....	0	1	0	0	0	9	0	0	4	11	22	0	2	4	2
Hernando.....	0	0	1	0	0	18	1	2	2	11	25	2	5	8	3
Highlands.....	0	2	0	0	0	28	1	0	9	28	85	1	7	8	7
Hillsborough.....	4	20	6	0	3	578	45	8	66	396	1,170	31	141	72	131
Holmes.....	0	1	0	0	0	14	2	0	3	20	38	0	1	5	6
Indian River.....	0	1	2	0	0	35	6	0	8	14	102	3	10	12	7
Jackson.....	0	1	0	0	0	51	3	1	9	61	92	5	8	12	13
Jefferson.....	0	0	0	0	0	9	1	0	10	19	34	0	6	2	6
Lafayette.....	0	0	0	0	0	4	0	0	0	3	8	0	2	1	1
Lake.....	3	4	2	0	0	117	11	2	24	52	226	4	23	13	44
Lee.....	0	2	0	0	1	79	8	1	20	48	130	2	21	12	16
Leon.....	3	0	0	0	0	58	4	0	17	81	129	7	15	16	29
Levy.....	0	0	1	0	0	14	1	1	3	15	41	1	5	2	3
Liberty.....	0	0	0	0	0	3	0	0	2	7	15	0	1	2	2
Madison.....	0	2	2	0	0	9	3	0	4	11	46	0	5	2	4
Manatee.....	1	2	1	1	0	120	23	2	35	94	355	8	39	16	17
Marion.....	0	2	2	0	0	72	8	2	8	67	189	10	26	19	23
Martin.....	0	1	1	0	0	29	2	1	10	22	44	1	5	4	7
Monroe.....	0	2	0	0	0	50	6	1	9	42	85	3	12	15	6
Nassau.....	0	0	0	0	0	15	1	1	0	15	50	2	5	3	5
Okaloosa.....	1	1	0	0	0	32	2	2	10	30	61	8	3	7	11
Okeechobee.....	0	0	0	0	0	9	1	0	3	6	13	0	2	1	4
Orange.....	2	10	3	1	1	309	18	4	54	206	779	12	75	64	76
Osceola.....	0	0	0	0	1	40	3	1	4	36	97	1	19	4	12
Palm Beach.....	2	7	2	2	0	381	32	5	52	209	781	9	65	57	72
Pasco.....	1	3	1	0	0	79	4	1	8	53	141	2	10	11	9
Pinellas.....	2	17	11	0	1	944	59	10	94	764	2,054	31	203	61	107
Polk.....	3	2	0	0	0	245	24	3	39	249	541	13	64	49	71
Putnam.....	2	3	0	1	0	42	8	0	12	30	115	16	12	6	15
St. Johns.....	1	2	0	2	0	51	4	1	11	33	123	1	20	11	13
St. Lucie.....	0	2	1	0	0	60	3	0	17	37	110	6	15	12	9
Santa Rosa.....	0	1	1	0	0	21	2	0	6	24	48	0	6	4	4
Sarasota.....	2	1	1	0	0	152	10	6	18	88	316	2	42	10	17
Seminole.....	0	4	2	0	0	53	12	0	15	37	154	5	12	13	25
Sumter.....	1	0	0	0	0	18	3	0	4	21	42	1	1	5	12
Suwannee.....	1	0	1	0	0	16	0	0	10	25	61	4	4	4	8
Taylor.....	0	1	0	0	0	19	2	1	4	19	39	1	6	2	8
Union.....	0	0	0	0	0	3	0	0	1	6	19	0	2	2	4
Volusia.....	1	6	7	0	0	275	22	4	40	211	572	12	60	35	42
Wakulla.....	0	0	0	0	0	5	0	2	0	4	10	0	2	2	6
Walton.....	1	1	0	0	0	13	0	0	7	25	41	3	2	7	11
Washington.....	0	1	0	0	0	9	0	1	1	13	33	0	8	3	11

*Includes all vascular lesions affecting the central nervous system.

TABLE 11-A

RESIDENT DEATHS FROM CERTAIN CAUSES, BY COUNTY, FLORIDA, 1958 (FINAL FIGURES)

COUNTIES	Maternal Deaths	Tuberculosis	Syphilis	Dysentery (All Forms)	Acute Poliomyelitis	Malignant Neo- plasms (Cancer)	Diabetes	Anemias	Influenza & Pneumonia	Cardio-Vascular-Renal Diseases				Motor Vehicle Accidents	Other Accidents
										*Cerebral Vascular Disease	Heart Disease	Chronic Nephritis	All Other C-V-R Disease		
STATE.....	63	287	101	11	6	6,639	611	99	1,448	5,120	15,280	355	1,444	1,149	1,650
Alachua.....	0	2	2	0	0	71	8	3	21	112	151	7	18	12	24
Baker.....	0	0	0	0	0	5	1	0	2	6	13	0	2	5	7
Bay.....	0	1	1	0	0	48	3	0	15	41	110	2	10	18	22
Bradford.....	0	5	0	0	0	17	1	0	7	18	43	0	5	7	6
Brevard.....	2	2	1	0	0	90	7	0	25	52	195	3	18	21	24
Broward.....	2	11	11	0	0	397	30	6	78	241	859	28	81	56	103
Calhoun.....	0	0	0	0	0	8	0	0	6	16	25	0	1	1	1
Charlotte.....	0	0	0	0	0	20	1	0	2	13	44	0	7	7	7
Citrus.....	0	0	0	0	0	22	0	0	0	11	50	0	6	6	7
Clay.....	1	0	1	0	0	11	0	0	4	21	38	1	1	5	7
Collier.....	0	0	0	0	0	12	1	0	2	10	38	1	3	3	4
Columbia.....	2	0	0	0	0	18	3	0	5	50	52	1	8	2	11
Dade.....	6	67	24	2	1	1,386	121	19	300	716	2,870	36	224	190	243
DeSoto.....	0	0	0	0	0	20	4	0	1	13	32	3	1	3	4
Dixie.....	5	45	17	1	0	535	43	9	137	485	1,053	38	127	113	165
Duval.....	4	12	3	1	0	157	13	2	50	125	428	10	27	32	58
Escambia.....	0	0	0	0	0	6	0	0	4	5	14	0	3	2	2
Flagler.....	0	0	0	0	0	12	1	0	5	7	25	0	1	0	1
Franklin.....	1	0	0	1	0	32	8	0	14	43	89	4	9	11	17
Gadsden.....	3	2	1	0	0	3	1	0	3	3	11	0	3	0	1
Gilchrist.....	0	0	0	0	0	8	0	0	0	1	5	2	2	2	4
Glades.....	0	0	0	0	0	0	0	0	2	10	20	0	4	2	3
Gulf.....	0	1	1	0	0	14	0	0	5	11	31	0	3	2	8
Hamilton.....	0	1	0	0	0	4	3	0	4	11	33	2	10	11	4
Hardee.....	0	2	0	0	0	12	1	0	0	4	16	0	1	2	5
Hendry.....	1	0	0	0	0	5	4	0	0	4	16	0	4	6	5
Hernando.....	0	1	0	0	0	15	1	1	7	16	34	2	4	6	12
Highlands.....	1	1	1	0	0	39	3	2	5	23	86	2	10	6	12
Hillsborough.....	6	30	6	2	1	507	56	10	73	331	1,207	30	96	89	143
Holmes.....	0	0	0	0	0	13	2	0	1	15	48	0	5	7	5
Indian River.....	0	0	1	0	0	33	3	0	9	21	96	1	10	9	11
Jackson.....	1	3	0	2	0	32	2	0	12	56	88	8	18	12	14
Jefferson.....	0	0	0	0	0	15	2	0	8	23	34	1	4	3	6
Lafayette.....	0	0	0	0	0	2	0	0	0	2	16	0	0	0	0
Lee.....	1	2	2	0	0	74	15	1	29	61	224	4	23	14	23
Leon.....	2	5	0	0	0	59	6	2	10	37	150	3	16	13	18
Levy.....	0	2	1	0	0	61	3	0	25	72	118	7	16	14	26
Liberty.....	1	0	0	0	0	17	1	0	5	18	42	0	5	4	4
Madison.....	0	0	0	0	0	5	0	0	2	2	10	0	1	0	0
Manatee.....	0	0	1	0	0	8	3	1	3	20	67	3	2	2	16
Marion.....	1	2	0	0	0	100	15	2	33	95	315	5	41	21	17
Martin.....	0	2	2	0	0	57	11	2	26	70	200	11	18	19	29
Monroe.....	0	1	0	0	0	29	0	0	4	25	63	2	3	6	4
Nassau.....	0	1	0	0	0	50	5	0	12	38	64	3	6	7	12
Okaloosa.....	0	1	0	0	0	21	4	0	3	24	36	0	4	2	2
Okeechobee.....	1	4	0	0	0	29	1	0	10	25	68	3	7	15	21
Orange.....	0	1	0	0	0	1	0	0	3	6	8	0	1	5	8
Osceola.....	3	20	4	0	2	294	32	6	74	265	796	17	72	48	76
Palm Beach.....	0	2	0	0	0	32	2	1	10	39	124	2	18	4	8
Pasco.....	4	7	5	0	0	339	30	5	60	263	744	7	58	79	65
Pinellas.....	1	3	1	0	0	65	7	1	8	49	158	1	21	14	10
Polk.....	3	22	9	0	0	912	65	12	123	674	1,958	27	182	59	119
Putnam.....	4	6	0	0	1	243	19	6	47	205	563	15	56	44	64
St. Johns.....	1	1	0	0	0	51	6	2	11	39	134	19	7	10	22
St. Lucie.....	0	2	1	0	0	44	7	0	12	30	108	1	11	6	17
Santa Rosa.....	1	0	0	0	0	52	2	1	14	45	113	3	14	13	13
Sarasota.....	0	2	0	0	0	18	1	0	6	32	55	4	10	10	7
Seminole.....	0	1	2	0	0	123	13	0	19	81	311	5	29	17	23
Sumter.....	1	1	1	2	1	53	6	2	12	36	137	10	12	11	16
Suwannee.....	0	1	0	0	0	9	2	1	5	18	38	0	4	1	5
Taylor.....	0	0	0	0	0	25	1	0	7	27	56	2	7	4	7
Union.....	0	1	0	0	0	15	0	0	7	23	22	3	4	2	2
Volusia.....	1	6	2	0	0	10	1	0	0	6	20	0	2	2	47
Wakulla.....	0	1	0	0	0	241	29	2	38	212	612	11	66	43	5
Walton.....	0	1	0	0	0	5	1	0	5	11	14	0	2	3	5
Washington.....	3	1	0	0	0	14	0	0	10	31	48	3	3	5	6
Washington.....	0	1	0	0	0	10	0	0	3	24	30	0	4	5	8

TABLE 12
MARRIAGES BY RACE, DIVORCES, AND ANNULMENTS
FOR FLORIDA, AND EACH COUNTY, 1959

COUNTY	MARRIAGES			Divorces	Annulments
	Total	White	Nonwhite		
STATE.....	38,588	31,607	6,981	19,363	187
Alachua.....	453	341	112	182	2
Baker.....	65	52	13	121	
Bay.....	537	440	97	257	
Bradford.....	94	78	16	88	3
Brevard.....	726	606	120	732	4
Broward.....	2,482	1,980	502	983	8
Calhoun.....	39	39	0	41	
Charlotte.....	99	93	6	49	3
Citrus.....	107	92	15	71	
Clay.....	142	111	31	81	
Collier.....	139	133	6	39	
Columbia.....	168	122	46	73	
Dade.....	8,127	6,976	1,151	4,393	54
DeSoto.....	129	102	27	26	1
Dixie.....	40	31	9	15	
Duval.....	2,684	2,043	641	1,621	7
Escambia.....	1,478	1,191	287	767	17
Flagler.....	68	47	21	224	2
Franklin.....	54	41	13	25	
Gadsden.....	179	87	92	61	
Gilchrist.....	47	39	8	7	
Glades.....	34	19	15	9	
Gulf.....	89	71	18	59	
Hamilton.....	74	55	19	34	
Hardee.....	169	148	21	255	6
Hendry.....	137	112	25	47	
Hernando.....	142	128	14	54	1
Highlands.....	199	132	67	84	2
Hillsborough.....	3,413	2,882	531	1,633	10
Holmes.....	112	104	8	69	
Indian River.....	213	161	52	53	
Jackson.....	183	135	48	81	1
Jefferson.....	63	24	39	10	
Lafayette.....	22	19	3	3	
Lake.....	484	357	127	722	7
Lee.....	357	299	58	190	2
Leon.....	463	316	147	219	5
Levy.....	88	56	32	24	
Liberty.....	10	10	0	8	
Madison.....	73	53	20	23	
Manatee.....	493	398	95	137	1
Marion.....	411	295	116	92	1
Martin.....	151	113	38	46	1
Monroe.....	450	407	43	260	5
Nassau.....	75	65	10	34	
Okaloosa.....	329	306	23	254	
Okeechobee.....	67	61	6	27	
Orange.....	2,062	1,693	369	281	
Osceola.....	247	195	52	2	
Palm Beach.....	1,690	1,297	393	752	3
Pasco.....	370	337	33	135	4
Pinellas.....	2,712	2,407	305	1,056	10
Polk.....	1,794	1,478	316	747	9
Putnam.....	244	174	70	513	3
St. Johns.....	233	170	63	173	1
St. Lucie.....	335	222	113	140	1
Santa Rosa.....	234	216	18	75	
Sarasota.....	555	501	54	257	2
Seminole.....	402	278	124	162	
Sumter.....	129	103	26	103	1
Suwannee.....	113	92	21	51	
Taylor.....	100	82	18	28	
Union.....	50	37	13	42	
Volusia.....	949	783	166	502	5
Wakulla.....	45	31	14	0	
Walton.....	93	84	9	33	
Washington.....	73	57	16	28	

TABLE 13
FLORIDA STATE BOARD OF HEALTH VITAL STATISTICS
SCOREBOARD BASED ON PROMPTNESS AND COM-
PLETENESS OF CERTIFICATES FILED IN 1959

COUNTY	Rank	Percent of Certificates Filed on Time		Percent of Complete Certificates		Percent of Monthly Reports Submitted on time	Total Score (Maximum = 500)	Change from 1958 Total Score
		Births	Deaths	Births	Deaths			
Glades.....	1	100.0	100.0	100.0	100.0	100.0	500.0	+67.4
Duval.....	2	99.8	99.9	99.9	99.8	100.0	499.4	+7.0
Hernando.....	3	100.0	99.2	99.7	100.0	100.0	498.9	+3.0
Jefferson.....	4	99.4	100.0	99.0	100.0	100.0	498.4	+2.4
Baker.....	5	100.0	98.1	100.0	100.0	100.0	498.1	-1.3
Hillsborough.....	6	98.3	99.6	99.9	99.9	100.0	497.7	+0.6
Dade.....	7	97.5	99.9	99.9	99.8	100.0	497.1	+0.4
Orange.....	8	98.1	98.8	99.9	99.8	100.0	496.6	-1.2
Citrus.....	9	98.5	100.0	99.2	98.8	100.0	496.5	-0.4
Sarasota.....	10	99.3	99.7	99.1	98.4	100.0	496.5	+0.2
Broward.....	11	97.2	99.9	99.4	99.6	100.0	496.1	-0.3
Volusia.....	12	98.6	98.5	99.4	99.5	100.0	496.0	+1.9
Martin.....	13	97.5	97.6	99.4	100.0	100.0	494.5	-3.7
Suwannee.....	14	96.7	97.8	100.0	100.0	100.0	494.5	+4.9
Seminole.....	15	99.2	99.1	99.4	96.3	100.0	494.0	+0.4
St. Lucie.....	16	99.6	95.6	99.5	98.8	100.0	493.5	-0.5
Wakulla.....	17	100.0	92.3	100.0	100.0	100.0	492.3	-5.8
Escambia.....	18	94.2	98.2	99.7	99.5	100.0	491.6	+16.3
Franklin.....	19	98.8	98.6	99.4	94.3	100.0	491.1	-1.4
Polk.....	20	93.6	97.4	99.7	99.6	100.0	490.3	+9.4
Hardee.....	21	94.0	97.9	100.0	97.9	100.0	489.8	+11.0
Washington.....	22	97.6	95.0	97.1	99.0	100.0	488.7	+18.2
Pinellas.....	23	90.0	98.5	99.8	99.8	100.0	488.1	+2.0
St. Johns.....	24	97.6	98.2	99.7	99.1	91.7	486.3	+1.5
Alachua.....	25	92.8	94.7	99.7	98.5	100.0	485.7	+9.1
Calhoun.....	26	92.3	98.0	97.1	98.0	100.0	485.4	+26.6
Holmes.....	27	96.3	92.7	96.3	100.0	100.0	485.3	+16.4
STATE.....		93.7	97.2	99.6	99.4	94.7	484.6	+3.1
Gulf.....	28	95.4	93.4	99.0	96.7	100.0	484.5	-4.0
Manatee.....	29	97.9	98.0	98.9	97.4	91.7	483.9	-0.9
Putnam.....	30	93.6	88.8	99.6	99.6	100.0	481.6	+4.8
Levy.....	31	89.9	93.6	98.7	98.7	100.0	480.9	+4.0
Madison.....	32	85.4	99.1	97.0	99.1	100.0	480.6	-4.4
Walton.....	33	90.7	90.1	100.0	99.3	100.0	480.1	-1.0
Palm Beach.....	34	83.0	97.8	99.8	99.3	100.0	479.9	+1.0
Brevard.....	35	86.3	93.2	99.3	99.7	100.0	478.5	+14.9
Flagler.....	36	100.0	97.6	100.0	97.6	83.3	478.5	+13.3
DeSoto.....	37	98.7	97.6	100.0	98.4	83.3	478.0	-3.4
Taylor.....	38	86.8	99.2	96.3	95.2	100.0	477.5	+3.8
Osceola.....	39	84.4	96.2	97.8	98.5	100.0	476.9	-12.5
Indian River.....	40	98.7	97.7	98.5	98.5	83.3	476.7	+46.8
Hamilton.....	41	91.6	87.5	98.9	98.6	100.0	476.6	+14.6
Gadsden.....	42	82.6	94.8	99.1	99.6	100.0	476.1	+2.2
Monroe.....	43	89.6	88.2	99.6	98.6	100.0	476.0	+12.1
Highlands.....	44	89.5	95.2	98.9	98.2	91.7	473.5	-6.3
Clay.....	45	86.0	95.0	99.5	97.5	91.7	469.7	-14.1
Okeechobee.....	46	80.7	90.0	98.2	100.0	100.0	468.9	-11.7
Santa Rosa.....	47	92.6	84.7	99.7	100.0	91.7	468.7	+15.0
Okaloosa.....	48	85.9	81.7	99.0	99.1	100.0	465.7	+46.5
Bradford.....	49	95.1	96.3	99.0	100.0	75.0	465.4	+17.0
Lake.....	50	88.5	78.5	98.8	98.8	100.0	464.6	-6.3
Union.....	51	85.7	90.7	95.7	98.1	91.7	461.9	+29.9
Charlotte.....	52	65.2	98.6	98.3	99.2	100.0	456.3	-20.6
Bay.....	53	79.3	78.1	99.7	98.3	100.0	455.4	-9.2
Nassau.....	54	87.2	94.5	98.5	99.2	75.0	454.4	-33.9
Leon.....	55	92.5	88.8	99.1	98.9	75.0	454.3	+23.3
Jackson.....	56	83.4	77.0	99.5	99.6	91.7	451.2	+14.2
Lafayette.....	57	77.3	93.3	95.5	100.0	83.3	449.4	+8.8
Hendry.....	58	52.4	96.8	97.3	100.0	100.0	446.5	+29.9
Dixie.....	59	61.8	100.0	96.4	94.1	91.7	444.0	-11.2
Collier.....	60	67.8	90.3	100.0	100.0	83.3	441.4	+27.3
Sumter.....	61	65.6	75.0	100.0	100.0	100.0	440.6	+8.8
Pasco.....	62	74.8	88.8	97.5	98.6	75.0	434.7	-22.6
Gilchrist.....	63	59.1	75.0	100.0	100.0	100.0	434.1	-45.8
Marion.....	64	61.5	85.6	97.9	98.7	83.3	427.0	-0.7
Lee.....	65	64.4	88.5	98.2	97.6	75.0	423.7	+0.4
Columbia.....	66	74.8	84.8	100.0	98.4	58.3	416.3	-35.7
Liberty.....	67	58.3	60.0	91.7	100.0	75.0	385.0	-67.8

BUREAU OF MATERNAL AND CHILD HEALTH

S. D. DOFF, M.D., M.P.H., Director

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VITAL DATA

The year of this report marks the end of a decade characterized in Florida by many interesting changes having important implications for this bureau. During the decade the proportion of our population in the age groups from birth to age 19 has increased at a rate greatly exceeding that of "the aged" — 65 and over, reaching close to 40 per cent of the total population in 1959.

Comparison of 1940-49 and 1950-59 shows that the former had an average birth rate of 21.5 per 1,000 population and an average infant death rate of 43.3 per 1,000 live births, and the decade just ended an average birth rate of 24.5 and an average infant death of 31.8.

Most of the decrease in infant mortality is of course due to better control of infectious diseases. The progress that can still be made in this area seems to be limited. As Table 14 shows we appear to have reached a point beyond which further decreases may not be achieved except by unusual application of existing programs or the designing of new programs bearing particularly on neonatal health problems.

TABLE 14

RESIDENT INFANT DEATHS AND NOTES — PER 1000
LIVE BIRTHS — BY RACE, FLORIDA 1950-59

YEAR	TOTAL		WHITE		NONWHITE	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
1959*	3,537	31.4	2,046	25.1	1,491	48.2
1958	3,425	31.7	1,924	24.6	1,501	50.2
1957	3,317	32.0	1,827	24.4	1,490	51.6
1956	3,090	31.8	1,652	23.7	1,438	52.2
1955	2,649	29.7	1,476	23.0	1,173	46.8
1954	2,654	31.3	1,526	24.8	1,128	48.5
1953	2,487	31.1	1,418	24.3	1,069	49.0
1952	2,526	34.0	1,385	25.8	1,141	55.3
1951	2,329	33.1	1,362	27.0	967	48.4
1950	2,078	32.3	1,225	26.8	853	45.7

*Preliminary Data

Death records and sickness rate (morbidity) reporting have been useful for many years as indicators of the more serious public health problems and as indices of progress in prevention and control. These indices alone no longer suffice.

Among reportable communicable diseases, the most important are shown below together with the number of deaths due to each among children under 15 (1958 data latest available).

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	Cases Reported	Deaths
Diphtheria	54	3
Dysentery - A & B	188	6
Gonorrhea	236	0
Infectious Hepatitis	88	2
Meningococcus M	70	17
Salmonellosis	82	0
Tetanus	20	10
Tuberculosis - active	59	9
Typhoid Fever	9	0
Measles	12,514	12
Chicken pox	not available	3
Mumps	2,702	1
Polio	161	1

Among nonreportable diseases for the year (1958) selected ones are shown for deaths only among children under 15.

	Deaths
Heart Disease	28
Congenital Malformations	477
Certain Diseases of Early Infancy (including prematurity)	2034
Accidents (excluding motor vehicle)	397
Malignant Neoplasms	72

With the exception of cancer which is reportable, the presence of uncounted thousands of children with moderate to severe disabling disease of a chronic or lethal type can be suspected in Florida from the annual reports of state agencies providing special services to them.

Agency	(1958) Children Served or Domiciled
Florida Crippled Children's Commission	1600 (hospitalized)
Florida Council for the Blind	604 patients
Sunland Training Center	2000 (waiting list 1600?)
State School for the Deaf and Blind	711 pupils

The need for reasonably accurate reporting of certain noninfectious diseases is critical and methods of collecting such data must be developed. In the collection of vital data we stand somewhat in the same relation to current public health problems as did public health workers in the early 1900s before expansion of birth registration areas.

If the population explosion in Florida portends any serious problems for the state we believe they are to be found in the growing burden of young persons chronically sick with diseases against which preventive measures must be developed, treatment and rehabilitative services organized.

CHILD HEALTH

The preventive aspects of obstetrics and pediatrics and their application in public health and child welfare are the stock in trade of this bureau and of County Health Departments engaged in public health activities for children.

The preventive programs of the past year are here outlined in relation to the period in child growth and development which they primarily serve and to available morbidity and/or mortality data.

MATERNAL HEALTH (Fetal Health)

In 1958 there were 1812 stillbirths (fetal deaths). These deaths sometimes referred to as "fetal wastage" are part of a continuum which includes the over 2000 deaths due to diseases of early infancy, more than 500 deaths due to congenital malformations and a few thousand survivors with these diseases as a chronic condition.

Careful attention to the health of pregnant women and prevention of common complications of pregnancy result in fewer interruptions of pregnancy, fewer stillbirths, less premature births and a lower incidence of deformities and birth injuries. Prenatal clinics of County Health Departments provided preventive services to 12,000 indigent or medically indigent pregnant women during the year, or approximately 10 per cent of all reported pregnancies. Each made an average of 3 visits to the clinic in the antepartum period. However, only 3690 women (a little more than one-fourth of those attending prenatal clinics) were given postpartum medical examinations. One may raise the question whether maternal health programs of County Health Departments, particularly prenatal clinics, are provided out of a great concern for the health of the fetus and the production of healthy offspring and a lesser concern for the health of the mother.

Maternal deaths are at the lowest level in our history of record-keeping with a preliminary total of 57 maternal deaths in 1959, a rate of 5.1. Our maternal death rate for white women was 2.1 which is lower than the national average. These low rates are related to the fact that about 93 per cent of all births took place in hospitals. While further small decreases in the maternal death rate can be anticipated as facilities for obstetrical care improve, it is essential that future studies in the field of maternal health be designed to record maternal morbidity in addition to maternal mortality as an index of progress. It is a reasonable hypothesis that the very low maternal death rate is an indication of the ability of physicians using modern methods of treatment to prevent death.

The midwife still provided a large portion of obstetrical care in Florida as indicated by some 7000 midwife-attended births in homes. Almost all of these births are in women who have attended prenatal clinics of County Health Departments. Licensure and close supervision of midwives by county health officers gives reasonable assurance of safe

childbirth for pregnant women who choose to have their babies at home. Continuing efforts of our county health officers to evolve workable low-cost maternity plans will lead to an even larger percentage of hospital deliveries than previously. However, midwives must be provided with the opportunity for continual inservice training under the immediate supervision of physicians. Better methods of recording the events of births attended by midwives must be developed.

INFANT HEALTH

During 1958 there were 108,014 births, a rate of 24.3 per 1000 population. In the same period 3425 infant deaths were recorded of which 2365, more than two-thirds, occurred in the first month of life, the neonatal period. Our inability to effect any substantial reduction in the infant death rate during 1950-59 is due to failure of medical science as yet to find effective tools for prevention of the chief causes of neonatal deaths.

TABLE 15

Neonatal Deaths from Selected Causes 1958

Congenital Malformations	240
Birth Injury	298
Accidents	19
Postnatal Asphyxia and Atelectosis	600
Pneumonia of Newborn	113
Diarrhea & other infections	52
Hemolytic Disease	46
Nutritional Maladjustments, etc.	217
Immaturity*	615

*Immaturity is an associated cause in the majority of all neonatal deaths.

The number of survivors of these and other diseases of the newborn is unknown.

Among infants between 1 and 12 months of age, the main causes of death were diseases of the respiratory and gastrointestinal system, congenital malformations and accidents due to inhalation or the ingestion of food or other objects causing suffocation or obstruction, accidents causing mechanical suffocation in bed or cradle and other accidents.

Health department preventive programs for infants are represented by prenatal clinic services described above and the well child medical conferences which served 9,820 infants in 1959. Among the newly born careful examination is made to detect defects in development. Mothers are instructed concerning the hazards to infants in the first month. Feeding problems receive major attention.

Prematurity and related disorders of newborn were given special attention by the Premature Demonstration Center of Jackson Memorial Hospital, Miami. In its tenth year of operation 230 premature infants

were hospitalized under the Premature Demonstration Program of this bureau for a total of 5752 hospital days. This is slightly less than half the number of infants cared for in the Center during the year, which would mean that the number of hospital days would be approximately twice that given above. During 1959 two five-day seminars on care of premature infants were given by the Center staff. Seventy-two hospital nurses and 8 physicians attended. This brings to 142 the number of nurses and to 30 the number of physicians who have attended these postgraduate training programs started in 1958. Nurses came from hospitals in all major cities of Florida, with approximately 50 per cent coming from hospitals having a capacity of less than 100 beds. Two crossroads clinics on care of the premature infant were given by the special project staff for 20 physicians and 175 nurses working in rural hospitals having 25-50 beds. The Premature Demonstration Center has now been designated to serve as a regional training center and will offer a three-week postgraduate course in 1960. This project has stimulated moderate progress in construction of premature nurseries in hospitals but available facilities are still seriously inadequate. In 1959 nine per cent of 110,000 live births were recorded as premature. Fifteen hundred infant deaths were attributed to prematurity.

PRESCHOOL YEARS 1 - 4

In programming for this period of life County Health Department personnel put major emphasis on prevention of pneumonia, meningitis and other infections and accidents. Congenital malformations and the frequent appearance of neoplasms are also noted.

TABLE 16
Deaths from Selected Causes Age 1 - 4 (1958)

	<i>Deaths</i>	<i>Percentage of All Deaths</i>
Total (all causes)	588	100
Infectious Diseases	179	30.4
Congenital Malformations	65	11.1
Malignant Neoplasms	28	4.8
Accidents (Excluding motor vehicle)	124	21.1

In 1958 County Health Departments admitted to well-child medical service 11,000 children age 1-4 mostly of indigent families. Nurses held 27,000 child health conferences. Immunizations were given against smallpox, diphtheria, whooping cough, tetanus, poliomyelitis and typhoid fever. During the year this bureau, with the Division of Health Information, prepared a number of spot announcements which urged the examination and immunization of all preschool children. These were distributed to newspapers, radio and TV stations and were read or heard daily during the summer months.

Table 16 emphasizes the importance of teaching accident prevention to mothers of children 1-4. In 1959 thousands of special leaflets were distributed calling the attention of parents to the most common causes of accidents in this age group. This was done in cooperation with the Florida Pediatric Society by the pediatric consultant of this bureau.

Currently neither vital records nor morbidity reports make any reference to a child health problem of growing importance commonly recognized in the preschool child. This is represented by the steady accumulation of serious growth and development defects, many attended by moderate to severe degrees of mental retardation. These are of deep concern as well to the state training institutions and the State Department of Education.

The special project in mental retardation, the Developmental Evaluation Clinic, Miami, is now in its second year, accepting preschool children suspected of mental deficiencies for developmental evaluation on referral from physicians. Operational research in early detection, diagnosis and management of cases is carried on. A pediatrician, psychologist, public health nurse and social worker are studying problems of mentally retarded children in a family and community setting. Particular attention is being given to development of public health nurse roles. An interesting feature of the first report of the clinic showed 22 per cent of referrals had I.Q.s in the normal range.

CHILD HEALTH 5 - 14 YEARS

That the years between 5 and 14 represented a period of relative good health is indicated by the vital records. Accidents caused about half of all deaths in this period, and malignant neoplasms 9 per cent. However, marginal defects, many of which were not detected in the preschool period and which often lead to serious disability in later years, were commonly found.

Preventive medical programs of the County Health Departments with the schools of Florida provided 523,000 separate screening examinations. Approximately 55,000 of the screening tests required referral for further diagnosis. Careful teacher observation of pupils often discloses signs leading to the discovery of important defects. Vision, hearing and dental defects were most common. Especially troublesome is the frequency of mental health problems among children at this phase. About 5500 children were admitted to the mental health services of County Health Departments last year. Child guidance clinics reported 2640 children ages 5-13 were discharged in 1959.

Formal health instruction is started during these years. To improve such instruction in schools, the Teachers Project in Health Education gave public health instruction to 69 teachers in the summer of 1959. Twenty-four County Health Departments joined with the University of Florida, Florida State University, University of Miami and Bethune-Cookman College. The health educator of this bureau coordinated

various aspects of the project (initiated in 1955) with the cooperation of local Boards of Public Instruction, the State Department of Education, voluntary health agencies and the Division of Health Information.

In view of the frequent occurrence of accidents and of accidental deaths, parents and children are educated to accident hazards by distribution of pamphlets prepared especially for children 5 to 14 years of age.

CHILD HEALTH 15-19

Preventive medical services have not been fully developed for the adolescent. Preliminary observations in a junior-senior high school were made in 1959 by a team of State Board of Health consultants working with a County Health Department public health nurse and sanitarian. Dental defects appeared to be more common than in the 5-14 age group. Serious mental health problems were evident. Physical defects were not frequent. Nutrition studies indicated preference for foods deficient in vitamin C.

An interesting aspect of the study was the high interest students showed in health information beginning with those in the ninth grade. This suggested that more intensive instruction in health and preventive aspects of disease should be given at this time.

Difficulties in social adjustment to the school environment were common. Ill effects of unfavorable home conditions were revealed. These findings may be related to the results of a separate study by the State Board of Health, 1953, of vital records which showed that 22 per cent of all births among mothers age 19 or under were illegitimate. In 1958 there were 18,232 infants born to mothers age 19 and under.

HEALTH SERVICES FOR MIGRATORY AGRICULTURAL WORKERS

The special project to develop health services for migrants is now in its third year. Personnel engaged in this project includes 6 public health nurses, a medical social consultant, health educator, liaison worker, sanitarian, nutritionist, two clerks and 6 physicians (part-time) who offer comprehensive health services to the migrant and his family, but mainly to mothers and children.

As a direct result of the team's study of the problems of the migrants, several new service programs are now offered. Perhaps the most significant is that of low-cost maternity care. In this program, the migrant mothers are given regular prenatal examinations in a clinic setting, are delivered in the hospital and provided with a postpartum check-up 6 weeks after delivery. Medical fees and hospital costs are compatible with income of migrant laborers.

The sanitarian's study and reports of housing conditions at the migrant labor camps were helpful in the preparation of House Bill 269 (Chapter 59-476) which was made law in the 1959 session of the Legislature. This law which defines migrant labor camps requires that such camps be licensed in accordance with Chapter XXV of the Sanitary

Code of the State of Florida. Its enforcement has brought about better housing conditions for migrants.

The health educator, nutritionist and liaison worker have developed an educational leaflet series on child care, accident prevention and general health. Formal instruction has been made available to family groups of migrants and to pregnant women by the organization of evening meetings, in order to obtain as large an attendance as possible.

A comprehensive report of the progress made by the team during its 3 years of study was prepared by the team members. This booklet, entitled "Migrant Project 1959" has been widely distributed and enthusiastically received by other state agencies, legislators, educators and many health and welfare groups throughout the state, as well as other states interested in problems of agricultural migrants. The report has found its way to foreign countries through the Children's Bureau.

NINTH ANNUAL POSTGRADUATE OBSTETRIC-PEDIATRIC SEMINAR

The ninth annual seminar was held at Ormond Beach under the sponsorship of the Bureaus of Maternal and Child Health of the State Health Departments of Florida, Georgia, Alabama and South Carolina, the Florida Academy of General Practice and the Maternal Welfare Committee of the Florida Medical Association. Physician interest in the three-day seminar continues to grow as indicated by Table 17.

TABLE 17
ANNUAL POSTGRADUATE OBSTETRIC-PEDIATRIC
SEMINARS 1951-59
ATTENDANCE ACCORDING TO PROFESSIONS

PROFESSION	1951	1952	1953	1954	1955	1956	1957	1958	1959
Physicians.....	195	187	174	179	196	254	278	272	345
Nurses.....	7	31	77	96	102	88	118	135	98
Nutritionists & other.....	6	8	2	7	4	3	5	1	24
TOTAL ATTENDANCE...	208	226	253	282	302	345	401	408	467

TABLE 18
1959 POSTGRADUATE OBSTETRIC-PEDIATRIC SEMINAR
REGISTRATION BY STATES

STATE	Doctors	Nurses	Others	Total
Alabama.....	46	3	0	49
Georgia.....	79	3	2	84
South Carolina.....	37	3	0	40
Other States.....	11	0	0	11
Florida.....	172	89	22	283
TOTALS.....	345	98	24	467

MENTAL RETARDATION

The problem of mental retardation in Florida has not changed significantly during the year 1959. Of the 108,014 babies born in Florida in 1958 it is an educated guess that 3 per cent, or about 3300, were mentally retarded. Mortality figure indicates not over 1600 mentally retarded infants died during the year. Thus, at least 1700 mental retardates were added to Florida's 1959 child population. Of these 1700 it is estimated that 340 are sufficiently retarded to require institutionalization. This means that we will need to build a new institution the size of the Sunland Training Center at Gainesville every 6 years just to handle severely retarded newborns. We still add about 1360 mentally retarded children requiring special training and education to our local communities. Parents, after they overcome the initial shock of having a mentally retarded child, have had few resources to help them understand their child and their role in his training. It has been felt that County Health Department personnel could do much to help parents of mental retardates.

To this end a two-day training and orientation program has been developed which has been attended by health, welfare and education personnel. A full time public health nurse consultant has been assigned to work with the consultant on child growth and development in organizing and presenting the orientation sessions. During 1959 three of the two-day training programs were held at Sunland Training Center. In addition to these programs a one-day seminar in mental retardation was developed and tested in one of the local health departments. In light of the enthusiastic response to this seminar, it will be made available to all County Health Department personnel.

CONSULTATION SERVICES

Discussion groups on problems encountered in rearing healthy children were held in various parts of the state by the consultant on child growth and development. A total of 94 seminars reaching approximately 4000 parents, educators and health personnel were held during 1959. They were sponsored by Parent-Teacher Associations, Woman's Clubs, schools and County Health Departments. Their aim was achievement of a greater understanding of child behavior with the hope that this knowledge would reassure the adults of their skills in handling children and free them from the tension produced by ignorance. While it is difficult to measure the results of this program, there is evidence that the people exposed to the training are prone to consider the child as an integrated physical-psycho-social organism reacting to the various stresses rather than a bad child or a sick child.

A pediatric consultant was added to the central office staff in July 1959 and has begun an evaluation of County Health Department well child medical conferences and school health programs, and other activities involving preventive medical services for children including development of accident prevention education materials.

PUBLICATION

Migrant Project 1959: a 55 page report of 3 years study and development of health services for migrant agricultural workers.

Article by staff member:

Doff, S. D., and Turner, J. S., Jr.* Rheumatic Fever Below Age Five. J. Florida M. Asso. 45:1416-18, June 1959.

*Asst. Surgeon, USPHS assigned to Heart Disease Control Program of the Florida State Board of Health from 1956-1958.

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BUREAU OF PREVENTABLE DISEASES

JAMES O. BOND, M. D., M.P.H.

Director

During 1959 the bureau and all its divisions, save one, had changes in directorships. From the U. S. Public Health Service 2 physician-trainees were assigned to the Division of Epidemiology. A new position of Special Research Epidemiologist was established.

Two important new programs as major extensions of old programs were made during the year. The increasing importance of radiological health in public health was recognized by the official change in name of the Division of Industrial Hygiene to the Division of Radiological and Occupational Health, with significant increases to its staff. Under a grant from the National Institute of Health the program of study of atypical tuberculosis infections was expanded into a full research project.

The Venereal Disease Control Program was incorporated into the administrative structure of the Division of Epidemiology, recognizing its important part and place in general communicable disease control activities.

As a bureau, interests and efforts had a major orientation toward those preventable diseases which are communicable. Tuberculosis and syphilis continue to be the most difficult to control, thereby presenting the greatest problems both in numbers of cases and control efforts. Despite this, the decline in these diseases as a cause of death or disability over the past 50 years has been dramatic. Certain communicable diseases for which there are effective preventive measures continue to embarrass us by their presence. These include tetanus, diphtheria, whooping cough, parasitic diseases, poliomyelitis and typhoid fever. Others, which were a significant source of trouble only 15 years ago, are essentially absent and require only suppression and surveillance for sporadic cases. Amongst these are malaria, typhus, brucellosis and milk-borne disease. In contrast to past years, the viral diseases are requiring careful investigation and research. Many are newly diagnosable with laboratory techniques not available 5 years ago; some are newly detected diseases in Florida; others are perhaps even new disease agents for man. All require new skills in prevention and control.

Certain diseases of concern to the bureau are preventable if only facts and ideas can be made more communicable. These are the occupational diseases, of increasing importance due to Florida's rapid industrial growth. In radiological health a unique situation is encountered in preventable disease. As yet no significant diseases of public health importance have occurred due to radiation hazards, and for the first time a public health program is given an opportunity to prevent even the environmental hazard from which disease could ensue.

The bureau went to some effort to strengthen its relationship with the County Health Departments in Florida. An orientation program, contrasting with the usual one but complementary to it, was carried out wherein the new division and program directors spent time in certain counties learning the duties, responsibilities and problems of County Health Departments. The usual orientation programs are held in Jacksonville with County Health Department personnel gaining an acquaintance with the state programs. Although the bureau gives some direct services to local units through X rays, laboratory services, biologicals or inspections, by far the greatest time and contribution is in cooperative consultation and teamwork with County Health Departments in carrying out programs.

Looking toward another health agency neighbor, the relationship with the communicable disease control activities of the U. S. Public Health Service were further improved. Besides the full time assistance of an Epidemic Intelligence Service Officer, (USPHS) 3 major investigations were carried on in conjunction with the Communicable Disease Center, and one with the Tuberculosis Division of the Bureau of Special Health Services (USPHS). Two full time PHS physicians and one veterinarian have served in special programs in venereal disease control, radiological health and veterinary public health.

Within the bureau frequent cooperative activities are carried on. To mention only a few would include the loan of an X ray technician by the Division of Tuberculosis Control to the radiological survey team: the survey of mobile X ray units for safety by the Division of Radiological and Occupational Health; the cooperative study of bovine tuberculosis suspected of human origin by the Divisions of Veterinary Public Health and Tuberculosis Control; the field investigation of encephalitis and polio by venereal disease investigators; the cooperative investigation of brucellosis and leptospirosis by Veterinary Public Health and Epidemiology. In these and many other ways the 4 divisions function as an integral unit in Florida's public health program.

DIVISION OF EPIDEMIOLOGY

ROBERT E. MARKUSH, M.D., M.P.H.

Acting Director

JAMES F. MOLLOY, D.D.

Assistant Epidemiologist

SPECIAL COMMUNICABLE DISEASE ACTIVITIES**POLIOMYELITIS**

Reported cases of poliomyelitis declined from 252 in 1958, to 197 in 1959. While the number of non-paralytic and unspecified cases dropped sharply from 155 in 1958 to 65 in 1959, paralytic cases increased from 97 to 132. In 1958, Dade County, and perhaps other areas in the state as well, began to report as aseptic meningitis what

formerly had been diagnosed as non-paralytic poliomyelitis. Despite this, outbreaks of aseptic meningitis that the state experienced in 1958 apparently permitted a drop in reported cases of this syndrome from 349 in 1958 to 143 in 1959. The total of non-paralytic polio plus aseptic meningitis, therefore, dropped 59 per cent, while the total of paralytic cases increased 36 per cent.

Because of the severity of the disease, the availability of an effective vaccine, and the interest of the public, the division again gave considerable attention to poliomyelitis. Intense surveillance of reported poliomyelitis, which the State Board of Health instituted last year in cooperation with the U. S. Public Health Service, continued through 1959.

Although no epidemics were reported from the state, 4 special poliomyelitis surveillance reports were prepared during the year. They were designed to describe the epidemiological characteristics of the poliomyelitis cases occurring in Florida. Because of difficulty in interpreting cases diagnosed as non-paralytic, most conclusions were based on paralytic rates. The first report (August) pointed out that the attack rate in male children under age 5 years is strikingly high when compared to the rate in other age groups and to the rate for females. In the nonwhite, moreover, the discrepancy between male and female attack rates is far greater than is true for the white. The second report (September) included a breakdown suggesting that most paralytic cases occur in people who have not been vaccinated. When only those cases with laboratory confirmation were analyzed, as was done in a third report, the paucity of cases among the vaccinated was even more striking. Except for a few cases of Type III, the laboratory results indicate that most of the cases were caused by Type I virus.

The final poliomyelitis surveillance report in 1959 (October) compared the epidemiological pattern for 1959 with the two previous years. It pointed out that the incidence among the white race has been consistently higher than the nonwhite, despite the strikingly opposite situation in the rest of the nation. The rates in males have been consistently higher than the rates in females. There has been no marked change in the past 3 years in the age-specific attack rates, except that the rates in children under age 5 in both 1958 and 1959 were considerably higher than in 1957. The past year differed from the 2 previous years in the unusually large discrepancy between the male and female nonwhite attack rates. The following are the comparable rates, per 100,000 population for the 3 years:

1. <i>By Color</i>	1957	1958	1959
White	3.8	5.9	4.8
Nonwhite	2.7	5.2	2.8
Ratio	1.4	1.1	1.7
2. <i>By Sex</i>			
Male	3.8	6.9	5.6
Female	2.3	4.7	3.3
Ratio	1.7	1.3	1.7

3. <i>By Age</i>			
0-4	6.8	18.7	17.3
5-14	5.7	9.7	6.1
15-39	3.3	4.8	3.8
40+	0.1	0.4	0.1
4. <i>By Color-Sex</i>			
White			
Male	3.9	6.9	5.8
Female	2.4	4.9	3.7
Ratio	1.6	1.4	1.5
Nonwhite			
Male	3.4	6.8	4.4
Female	1.8	3.7	1.4
Ratio	1.9	1.8	3.1

A study of the seasonal variation in poliomyelitis during 1959 showed the usual sub-tropical pattern of a long season of increased incidence without complete regression during the winter months. In 1959 it appeared that more paralytic cases occurred in the early months of the year, compared to previous years and also compared to nonparalytic cases. Although the reasons for this were not all apparent, the tendency for non-paralytic central nervous system disease to both occur and be reported as poliomyelitis is probably greater in the summer season. The peak occurrence of reported poliomyelitis by week occurred in 1959 in the first week of August, which is slightly later than expected based on the seasonal pattern of recent years.

DIPHTHERIA

The year ended in Florida with a total of 83 reported cases of diphtheria. This gave an attack rate of 1.9 per 100,000 population, which is low for Florida, but still almost twice that of the nation. In 1959 there were 4 deaths in the state resulting from clinically diagnosed diphtheria.

The 4 counties with the highest diphtheria case rates were Pasco, Putnam, St. Johns and Duval. In this last county, a sharply localized outbreak in October, occurring in Jacksonville, caused an abrupt rise in cases which in turn gave Florida's diphtheria season an earlier start than is usual. The outbreak was carefully investigated by the Jacksonville City Health Department and this division. The cases all came from a small crowded section of the city. All were nonwhite, 90 per cent were under 10 years of age, and 20 of 23 were unvaccinated. Due to the crowded living conditions, person-to-person spread was considered the most probable means of transmission. A patient with skin ulcers that contained diphtheria organisms was discovered during the investigation; she may have been responsible for several of the cases. The clinical disease was not generally severe and there were no deaths. All organisms isolated were of the *mitis* strain.

A special diphtheria surveillance report was prepared during the year which called attention to the high rates in Negroes, in children under 10, in the unimmunized and in the areas of Tampa and Jacksonville.

INFECTIOUS HEPATITIS

Although infectious hepatitis has been reported as such in Florida only since 1954, the 342 cases that were reported in 1959 represented more cases than in any of the other 5 reporting years. The figures indicate that there has been a steady annual increase since the low point in 1956. Because of the state's rapid population increase, the rate per 100,000 this year is not so large as were the rates in the peak hepatitis years, 1952, 1953 and 1954; the rates for 1952 and 1953 were based on cases reported as "jaundice."

Increased numbers of cases reported from 4 counties accounted in large part for the unusual incidence this year. In these counties, Broward, Duval, Hillsborough and Manatee, the division played varying roles in investigation and surveillance.

The first outbreak investigated was that of 20 cases occurring at Bradenton and Palmetto, in Manatee County, where cases were linked through person-to-person contact and possibly through a contaminated well. The second investigation was prompted by 5 cases occurring in an elementary school in Duval County. In this instance, person-to-person contact again appeared to be the mode of spread. A third investigation was conducted in Broward County; an outbreak of 11 cases was traced to personal contact between children living within an area of a few blocks, many of whom rode the same school bus. In all these investigations, gamma globulin was recommended to those in close contact with the clinical cases.

An outbreak of infectious hepatitis occurred early in December in an elementary school in Ruskin, Hillsborough County. This was investigated by the Hillsborough County Health Department.

Because of the increasing number of cases, a "Report on Hepatitis" was issued in December. Analysis of the 308 cases occurring up to December 11 indicated an attack rate per 100,000 of 6.3 for the white and 8.1 for the nonwhite, which is not a significant difference. There was no apparent difference in attack rates by sex, with 156 cases in males and 145 in females. Analysis by 10 year age groups indicated that the 10-19 year olds were at greater risk, with their 65 cases representing a rate per 100,000 of 10.4. More cases, however, occurred in those under age 10, where the 78 cases gave a rate of 9.0 per 100,000. The rate in the 20 to 29 year olds was 8.2; in the older age groups the rates decreased to a low of 2.3 for those over age 60.

VIRAL ENCEPHALITIS

Late in October, the Pinellas County Health Department requested epidemiological aid from this division because of an increased

incidence of encephalitis. With the assistance of the Communicable Disease Center of the USPHS, 72 cases were eventually clinically confirmed. Two clinical syndromes were encountered; the first, and more common, generally occurred in people over the age of 50 and consisted of a fairly severe encephalitis. Except for 5 deaths, recovery generally required 2-4 weeks. A second, less severe, syndrome was more common in younger people and followed the pattern of aseptic meningitis. Because of the fairly general urban distribution, the high attack rate among the elderly, the absence of infant cases, the relatively low case fatality rate of about 7 per cent, and the virtual absence of known vectors of Eastern Equine encephalitis, the epidemiological study suggested the diagnosis of St. Louis encephalitis. The finding of rises in the titers of antibodies against St. Louis encephalitis antigens by the complement fixation, hemagglutination inhibition, or serum neutralizing tests for arthropod-borne viruses in the sera of at least 20 of the 58 cases who were tested, 2 of whom had aseptic meningitis, gave more support to the diagnosis of St. Louis encephalitis. Three cases occurring during the outbreak were found to have evidence of recent infection by Eastern Equine encephalitis virus.

The first cases that should probably be included in the outbreak occurred toward the end of July. The number of cases occurring each week gradually built up to a peak at the beginning of September, then dropped off temporarily. A second and greater wave reached its peak in the middle of October, when 10 cases occurred in one week. The cases gradually tapered off until, early in December, there were no new cases. An intensive search in the area detected no unusual illness in animals, wild birds, or domestic flocks. Attempts to isolate a viral agent from specimens that included human stool, blood, brain and cerebro-spinal fluid; blood from wild birds; and five small mosquito pools were all negative. Very few of the known vectors of Eastern Equine encephalitis or St. Louis encephalitis were present in the area during the period of maximum incidence.

Although a few cases of presumptive St. Louis encephalitis had been reported from the Miami area last year, the cases in St. Petersburg represent the first outbreak of probable St. Louis encephalitis reported in Florida.

A single sporadic case of St. Louis encephalitis infection was reported from Naples, in Collier County.

The 73 cases of viral encephalitis reported in Florida in 1959 is by far the greatest number ever reported in one year in the state. In 1958 the second greatest number, 24, were reported. It may be significant that the 2 counties that reported the second and third greatest numbers of cases in 1959 were Polk County with 8, and Hillsborough County with 5; both are geographically close to Pinellas County.

TYPHOID FEVER

The Virginia Health Department alerted us to several cases of typhoid fever among migrant workers returning to Kissimmee, Florida, who had been involved in a large outbreak of typhoid fever in Winchester, Virginia. Investigation by this division, working in conjunction with the Osceola County Health Department, concluded that the Kissimmee cases were the result, but not the cause of the Winchester outbreak.

Twenty-eight cases of typhoid fever were reported in Florida during 1959.

LEPTOSPIROSIS

In August 2 cases of leptospirosis that occurred in Duval County were carefully studied for source of infection. Although water specimens were taken from a suspect river in which one of the cases had been water skiing, and from a stagnant pond in which the other had waded, all laboratory tests were negative for leptospira.

OTHER COMMUNICABLE DISEASE INVESTIGATIONS

Four cases of typhus fever were recorded during the year. One of these, in a 12 year old white male in Plant City, received special investigation from this division.

One case of possible meningococcal meningitis occurring at the Raiford State Prison was investigated. Antibiotics were administered before laboratory confirmation of the diagnosis could be obtained. Sulfa drugs were administered to all the contacts of the patient. Although the patient died, there were no further cases. The total number of meningococcal meningitis cases reported in 1959 was 55.

Communicable diseases notable by their absence or few reports during 1959 include malaria with 2; brucellosis with 5 and Hansen's Disease with 1. There were no reports of large outbreaks of food poisoning, diarrhea or impetigo of the newborn, or influenza or other communicable diseases.

OTHER DIVISION ACTIVITIES**IMMUNIZATION SURVEY**

In cooperation with the Hillsborough County Health Department and the Communicable Disease Center of the USPHS, a survey of Hillsborough County was carried out to determine the immunization levels of the population against poliomyelitis, diphtheria, tetanus and smallpox. Although CDC had conducted more than 40 similar surveys in other states, this was the first such survey in Florida. Almost 1000 families in the county were interviewed. The results of the

survey indicated that the proportion immunized against all 4 diseases, especially against poliomyelitis, decreased markedly as socio-economic status decreased. It was found, for example, that in those under age 5 in the City of Tampa, 83 per cent of the white upper socio-economic group had received 3 or more inoculations against poliomyelitis, whereas the comparable figure for the lower white was 43 per cent and for the Negroes, 21 per cent. It is anticipated that the results of the survey will be useful to the health department in planning its immunization programs.

HEALTH EDUCATION

Assistance was given in a health education pilot study at a Jacksonville high school. Technical advice, and examination on communicable diseases, and instruction for a group of teachers on the general subject of communicable diseases was offered.

NON-COMMUNICABLE DISEASE ACTIVITIES

In keeping with the growing recognition that epidemiological techniques can enrich our understanding of chronic and non-communicable conditions, the division cooperated with other bureaus in the development of research programs. The division, while participating in the organizational stages of the inter-bureau Committee on Accident Prevention, explored several possible areas in which it could assist in the study of the epidemiology of injuries.

HEALTH EVALUATION STUDY

The division assisted the Bureau of Maternal and Child Health in evaluating the health status of the students at Jacksonville Beach high school. Information was obtained on the occurrence of skin lesions, and the possible association of these with personal hygiene and the isolation of staphylococci from the noses of these students.

VENEREAL DISEASE CONTROL

The Venereal Disease Control Program became a section of the Division of Epidemiology during 1959.

The program has maintained the same basic format with one program addition. The past year saw the beginning of an effort to control venereal infections through a long range plan of education. To this end, a Negro health educator was added to the staff. The emphasis of this program is on prevention rather than cure. The children of today are the adults of tomorrow, and as such are the ones in need of a good educational program geared toward eliminating the ignorance and other factors causing conduct and activity leading to venereal infection. One of the communicable diseases, venereal disease, has not generally been included in the health program of most schools, possibly because of the

taboos associated with it. Venereal disease is as much a part of the total communicable diseases as are any of the others. The program is not endeavoring to pull the venereal diseases out and set them apart from the communicable diseases, but rather, is interested in emphasizing the important facts of venereal disease since this is not being carried out in general health programs.

The personnel doing this work are very wisely working with principals, teachers and health educators engaged in public education. The theory is that those who work with and are closely associated with the pupils are in the best position to correlate the teaching of venereal disease education with all subject areas. By so doing, the stigma usually attached to the subject is lacking. Efforts then are directed toward the teachers, supervisors and school administrators who in turn will work with and teach this subject.

Presently, a pilot study is being conducted in one of the Negro junior-senior high schools in Duval County. Pertinent and informative presentations about communicable diseases, with emphasis on venereal disease, are presented to the teachers by the health educator along with key consultants from the state and local health departments, the State Department of Education, and Duval County School Board.

There was a significant increase in the number of cases of syphilis reported. Table 20 shows a comparison for the years 1958 and 1959. As shown in the table, there is an increase in number of reported cases, of 36.0 per cent in all stages of syphilis, an increase of 71.1 per cent in early infectious syphilis, and a 13.3 per cent increase in gonorrhea and other venereal diseases. The increased rates per 100,000 are slightly less, but are still significant. This increase must be considered a true increase in the incidence of the disease rather than as a product of better reporting. The increase in reported lesion syphilis bears this out.

It is interesting to note that reporting by private physicians also showed a marked increase. The percentage of increase by category is as follows: all syphilis, 46.1 per cent increase; lesion syphilis, 83.7 per cent; private physicians reported and treated 51.9 per cent of the total syphilis cases.

The program has 13 full time interviewer-investigators who have received special training in working with infected persons. The state is divided into districts with a trained person assigned to each district to provide epidemiologic services to all County Health Departments and private physicians desiring these services.

A continuing program to extend epidemiology beyond named sex contacts is in effect. The testing of suspects and associates allows an early detection and treatment of infected persons.

Emphasis was placed on getting private laboratories doing serologies to cooperate with this program. This cooperation allows for more

accurate reporting of reactive specimens and adds to the accuracy of case reporting.

The venereal disease investigators are continuing to give assistance to local health officers individually and collectively in communicable disease programs and studies other than their specific venereal disease programs.

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TABLE 19

REPORTED CASES OF PARALYTIC AND TOTAL POLIOMYELITIS WITH
INCIDENCE RATES PER 100,000 POPULATION
BY AGE, COLOR AND SEX, FLORIDA, 1959
Incidence Rates (with number of cases in parenthesis)

Age in Years	TOTAL			WHITE			NONWHITE		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
PARALYTIC POLIOMYELITIS									
All Ages.....	2.9 (132) *	3.5 (79)	2.2 (51)	3.2 (119)	3.9 (71)	2.6 (48)	1.2 (11)	1.8 (8)	0.6 (3)
Under 5.....	10.5 (53)	12.1 (31)	8.9 (22)	11.4 (43)	11.9 (23)	10.8 (20)	7.9 (10)	12.7 (8)	3.2 (2)
5-14.....	3.7 (31)	4.0 (17)	3.4 (14)	4.8 (31)	5.1 (17)	4.4 (14)	—	—	—
15-39.....	2.8 (45)	3.9 (30)	1.8 (15)	3.5 (44)	4.9 (30)	2.2 (14)	0.3 (1)	—	0.6 (1)
40 years and over....	0.1 (1)	0.1 (1)	—	0.1 (1)	0.1 (1)	—	—	—	—
TOTAL POLIOMYELITIS									
All Ages.....	4.3 (197) *	5.5 (124) *	3.0 (71) *	4.6 (173) *	5.9 (108) *	3.5 (65) *	2.5 (22)	3.6 (16)	1.3 (6)
Under 5.....	16.3 (82)	21.1 (54)	11.3 (28)	16.4 (62)	19.7 (38)	13.0 (24)	15.9 (20)	25.4 (16)	6.3 (4)
5-14.....	6.1 (51)	6.8 (29)	5.3 (22)	7.7 (50)	8.7 (29)	6.6 (21)	0.5 (1)	—	1.1 (1)
15-39.....	3.7 (58)	5.0 (39)	2.3 (19)	4.6 (57)	6.4 (39)	2.8 (18)	0.3 (1)	—	0.6 (1)
40 years and over....	0.1 (1)	0.1 (1)	—	0.1 (1)	0.1 (1)	—	—	—	—

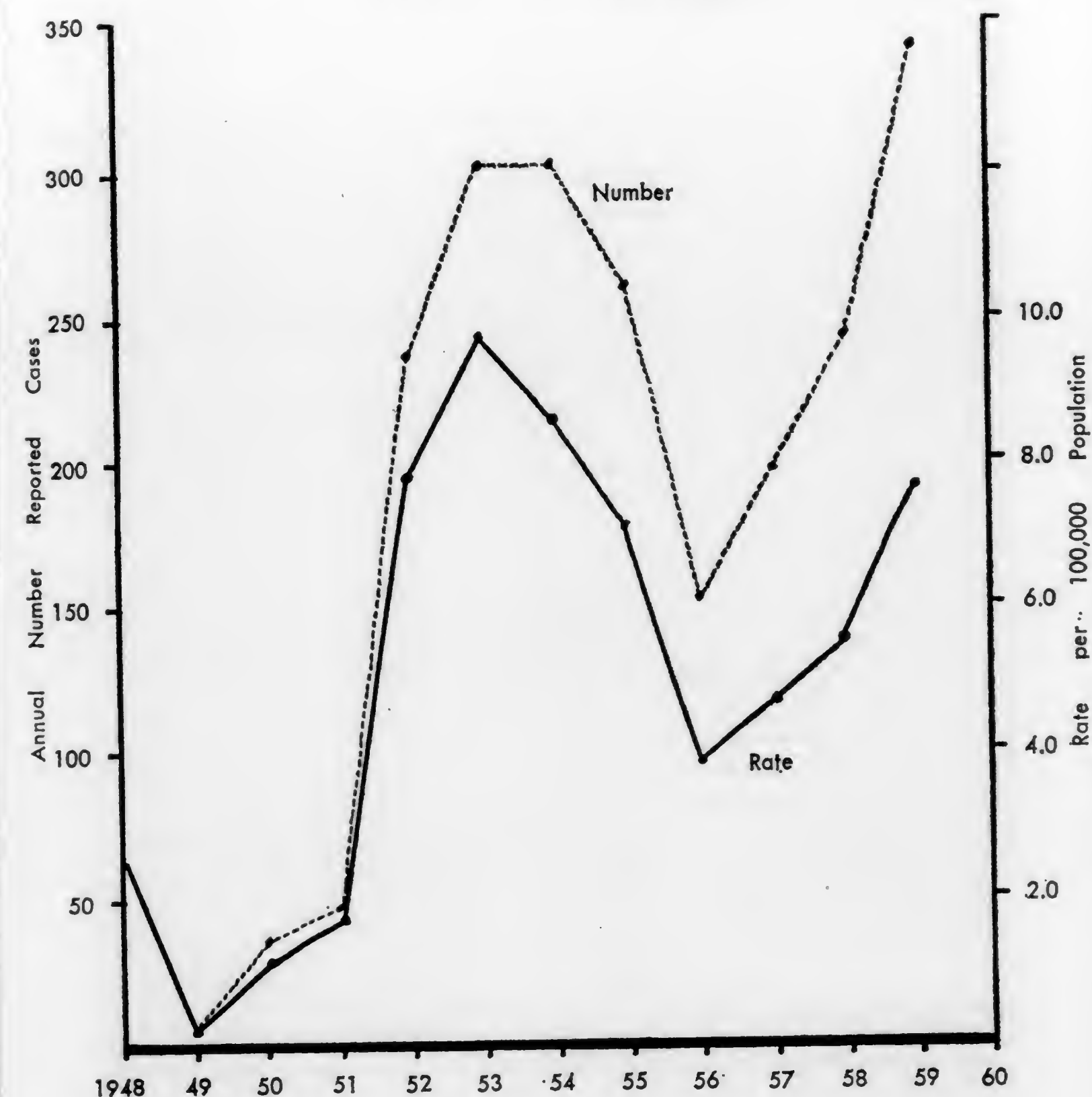
*Totals which include a few cases with age, color, sex, paralytic status, or combinations thereof, undetermined.

TABLE 20

REPORTED VENEREAL DISEASE IN FLORIDA — 1958, 1959
BY DISEASE AND SOURCE OF REPORT

	All Syphilis			Primary and Secondary Syphilis			Gonorrhea and Other V. D.		
	1958	1959	% Change	1958	1959	% Change	1958	1959	% Change
All Sources.....	3,186	4,332	+36.0	201	344	+71.1	10,619	11,480	+8.0
Private Physicians..	1,532	2,238	+46.1	49	90	+83.7	379	989	+160.9%

FIGURE 1
REPORTED CASES OF INFECTIOUS HEPATITIS
AND INCIDENCE RATES, FLORIDA 1948-59
(Prior to 1954, these numbers represent cases reported as "jaundice.")



DIVISION OF RADIOLOGICAL AND OCCUPATIONAL HEALTH

EDWIN G. WILLIAMS, M.D.
Director

OCCUPATIONAL HEALTH

FIELD ACTIVITIES

A recent report of the Florida Development Commission stated that by June 1959, 285 new industrial plants had announced their intention to locate in Florida and begin operations by early 1960. These new plants plus the 151 announced major expansions will increase the industrial working force by about 12,800 persons to a total greater than 200,000 persons. This rapid growth is a current day characteristic of nearly every occupational pursuit found in Florida. It is probable that the magnitude of the occupational health problem will keep pace with the increasing number of people employed.

Division personnel made 240 visits to 192 establishments, employing about 14,600 persons. These statistics do not compare favorably with the growth figures reported above but represent approximately 100 per cent increase over the division's 1958 totals. These are summarized in the following table.

TABLE 21
FIELD ACTIVITIES — 1959

Industrial Establishments Given Service	162
Employees in Establishments Visited	14,582
Other Work Places and Areas Visited	30
Number of Field Visits	
Self-initiated	114
Agency referrals	70
Requests or complaints	12
Revisits	44
Total.....	240
Sampling in Technical Studies	
Field determinations:	
Atmospheric contaminants	117
Physical conditions	82
Samples for laboratory analysis	
Collected	154
Type and Number of Field Services	
Routine inspection	90
Environmental survey	88
Technical study	21
Consultation	112
Follow-up	15
Air pollution investigation	25
Occupational disease investigation	15
Total.....	366
Environmental Recommendations	
Made	137
Compliance verified	37

Approximately half of the visits were initiated by the Division in attempting to keep abreast of Florida's growth. Intensive survey work was performed in the rapidly growing areas but the extent of this activity was severely limited by the shortage of personnel and the large volume of work in the laboratory.

One-third of the visits came as a result of complaints or requests. Complaints of odors were received from such diverse establishments as physicians' offices, department stores, newspaper offices, service stations and private residences. Investigations generally revealed that no health hazards were involved and that conditions could be markedly improved by providing better ventilation. Requests for service were referred to the division from city officials, County Health Departments, other state agencies, plant management and employee groups. An East Coast town experienced a week-long fumigation characterized by an acrid odor. An investigation led to the conclusion that the incident probably occurred because conditions in the sea were conducive to a rapid multiplication of an organism similar to *Gymnodinium brevis*, which has been implicated in the "Red Tide" episodes. A fiberglass boat manufacturer, concerned about air-borne dust in his plant, requested a dust study. This showed that relatively high concentrations did exist, so recommendations were made to improve housekeeping and ventilation. The operator of a new citrus packing plant requested a survey because he was concerned about carbon monoxide hazards resulting from the use of gas-powered fork lift trucks. He has substituted electric units and has experienced no further trouble. Illness among brewery workers led to a request from the Florida Industrial Commission for a study of carbon dioxide exposures. The study proved that high concentrations existed in certain areas of the plant. Recommendations made for improved ventilation were put into effect immediately. The death of a skin diver led to a request from his survivors to analyze the air he was breathing at the time of his accident. Analyses revealed that there were no toxic concentrations in the air but the accompanying investigation has shown the need for, and a demand for, control of the quality of air supplied to skin divers. An investigation of an outbreak of skin trouble among workers of the Florida Forestry Service led to the finding that the disease was *sporotrichosis*, contracted during the handling of nursery stock. Once identified and treated properly the trouble was eliminated.

Division personnel assisted in evaluation of several unvented gas-burning trailer heaters of a type which had caused 16 deaths from carbon monoxide in some midwestern states. These studies involved cooperation with the U. S. Public Health Service, the Division of Sanitation and County Health Departments. Attempts have been made to locate all the defective heaters of the model concerned and to have them repaired or replaced.

Attempts to stimulate and maintain the interest of County Health Department personnel in occupational health work continued throughout the year. That these efforts were fruitful is evidenced by the assignment of a sanitarian to full time industrial hygiene activities in Dade County.

At the request of the County Health Department, division personnel assisted in planning the county program and in training the sanitarian for his work.

Efforts to maintain and improve the relationships with the Florida Industrial Commission were continued. This staff joined with Florida

Industrial Commission inspectors in investigating the circumstances leading to the deaths of 2 South Florida construction workers in a new sewer. Results were inconclusive, but led to the belief that hydrogen sulfide could have been the causative agent. During the year, the division requested and again began receiving reports of occupational diseases from the Workmen's Compensation Division. In the 467 reports received there were 353 cases of various types of dermatitis, 72 cases of parathion poisoning, 34 cases of various infections and 8 miscellaneous cases. Dermatitis cases, comprising three-fourths of the total, were caused primarily by alkaline or other chemicals, by citrus or other plants and by fungi or larva migrans.

Consultations with USPHS representatives during the year were concerned primarily with broadening the scope of the total program, assistance in the field of occupational dermatology, planning courses for health officers and sanitarians, and in assistance in developing and conducting the X-ray survey program.

LABORATORY ACTIVITIES

The division's chemists performed 898 analyses on 652 samples during the year. Associated with these analyses were an additional 152 determinations of reagent blanks, controls and standards. In addition to their laboratory duties, the 2 chemists performed surveys, technical studies and other field work as required. In the course of field work, 154 samples were collected for laboratory analysis, 117 field determinations of atmospheric contaminants were performed and 82 field determinations of physical conditions were made.

TABLE 22
LABORATORY ACTIVITIES
ANALYTICAL DETERMINATIONS

ANALYSIS FOR	SAMPLE	SOURCE	Number of Analyses
Lead	Human Tissue or Fluid	Doctors, Hospitals, Armed Services, Industry	374
Lead	Air, Dust, Photos	Industrial Hygiene Study	32
Flouride	Vegetation	Polk County Study	340
Dust Counts	Air	Industrial Hygiene Study	44
Zinc, Cadmium & Bismuth	Human Tissue	Doctors & Hospitals	27
pH, Chloride, Nitrogen & Phosphorus	Air and Sea Water	Air Pollution Investigation	26
Sulfate	Urine	Armed Forces	20
Thiocyanate	Urine	Armed Forces	14
Carbon Dioxide	Air	Industrial Hygiene Study	7
Zinc, Cadmium & Manganese	Welding Rod Coating	Industrial Hygiene Study	3
Free Silica	Dust	Industrial Hygiene Study	2
pH	Solutions	Industrial Hygiene Study	4
Phosphorus	Human Tissue	Doctors & Hospitals	2
Iron	Dust	Air Pollution Control	2
Pollen	Dust	Health Department	1
Total			898

REAGENT BLANKS, CONTROLS AND STANDARDS

Total..... 152

FIELD DETERMINATIONS OF ATMOSPHERIC CONTAMINANTS

Carbon Monoxide	50
Hydrogen Sulfide	33
Combustible Gases	21
Oxygen	13
Total	117

The determination of lead content of a large number of various materials constituted the largest number of analyses of a single type run in the division's laboratory. Several series of blood and urine lead determinations were performed on specimens from Armed Service personnel who had been exposed accidentally to tetraethyl lead. In cooperation with an industrial physician, blood and urine lead determinations were run on smelting plant employees before, during and after specific therapy. During the course of investigating a complaint in a printing company office, it was found that yellowed papers and photographs were higher in lead content than unyellowed specimens of the same materials. The most unorthodox samples submitted for lead analyses were small bottles of "homemade liquor." The fact that both samples showed high lead content has led to many interesting surmises and conclusions.

The determination of fluoride content on a variety of vegetation samples submitted by the Polk County Air Pollution Control District constituted the next largest number of analyses of a single type. This service was transferred to the Bureau of Sanitary Engineering during the year.

A variety of determinations run on many different materials made up the balance of analytical work performed. Zinc, cadmium and bismuth analyses were performed on specimens of tissue obtained from

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Thiocyanate	Urine	Armed Forces	14
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Zinc, Cadmium & Manganese	Welding Rod Coating	Industrial Hygiene Study	3
Free Silica	Dust	Industrial Hygiene Study	2
pH	Solutions	Industrial Hygiene Study	4
Phosphorus	Human Tissue	Doctors & Hospitals	2
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a person who had died showing symptoms of metal poisoning. Urinary sulfate ratios were run on a group of service men potentially exposed to benzene in their work. Dust counts and free silica determinations were made on samples collected in foundries and boat manufacturing plants. Urinary thiocyanate levels were determined on service personnel potentially exposed to cyanide.

TRAINING

Since radiological health is relatively new to public health programs and since Florida is rapidly expanding as an industrial state, this division has intensified its training activities during the year. A two-day course in radiological health and radiation emergencies was organized and conducted at the Alachua County Health Department for public health personnel, peace officers and civil defense workers in the Northeastern Civil Defense Operational Area. Personnel of the division assisted the civil defense authorities of Dade County in conducting a training course in radiological defense monitoring. A series of 15 film and discussion periods was held in the Dade County Health Department for their personnel.

RADIATION SURVEILLANCE NETWORK

Throughout the year high-volume air sampling devices and precipitation collectors were operated as a part of our continued participation in the nationwide study of air-borne contamination and natural background. Filters in the air sampler are changed daily, monitored for radioactivity and forwarded to the USPHS laboratory in Washington for more complete and subsequent study. Precipitation is collected and measured by approved meteorological procedures. The water samples were evaporated to dryness and forwarded to Washington for detailed study. This program involved the handling of 234 air samples and 119 samples of rain water.

RADIOLOGICAL HEALTH SURVEY OF X RAY EQUIPMENT

This is the first full year of operation of the program of radiation exposure control through consultation and detailed measurements of X ray equipment used in physicians' offices and clinics. At the time of each visit, attention was directed to the adequacy of protection not only of the patient, the physician and his assistants, but of those in occupied adjacent spaces. The survey has been in part developmental and was essentially limited to Dade County.

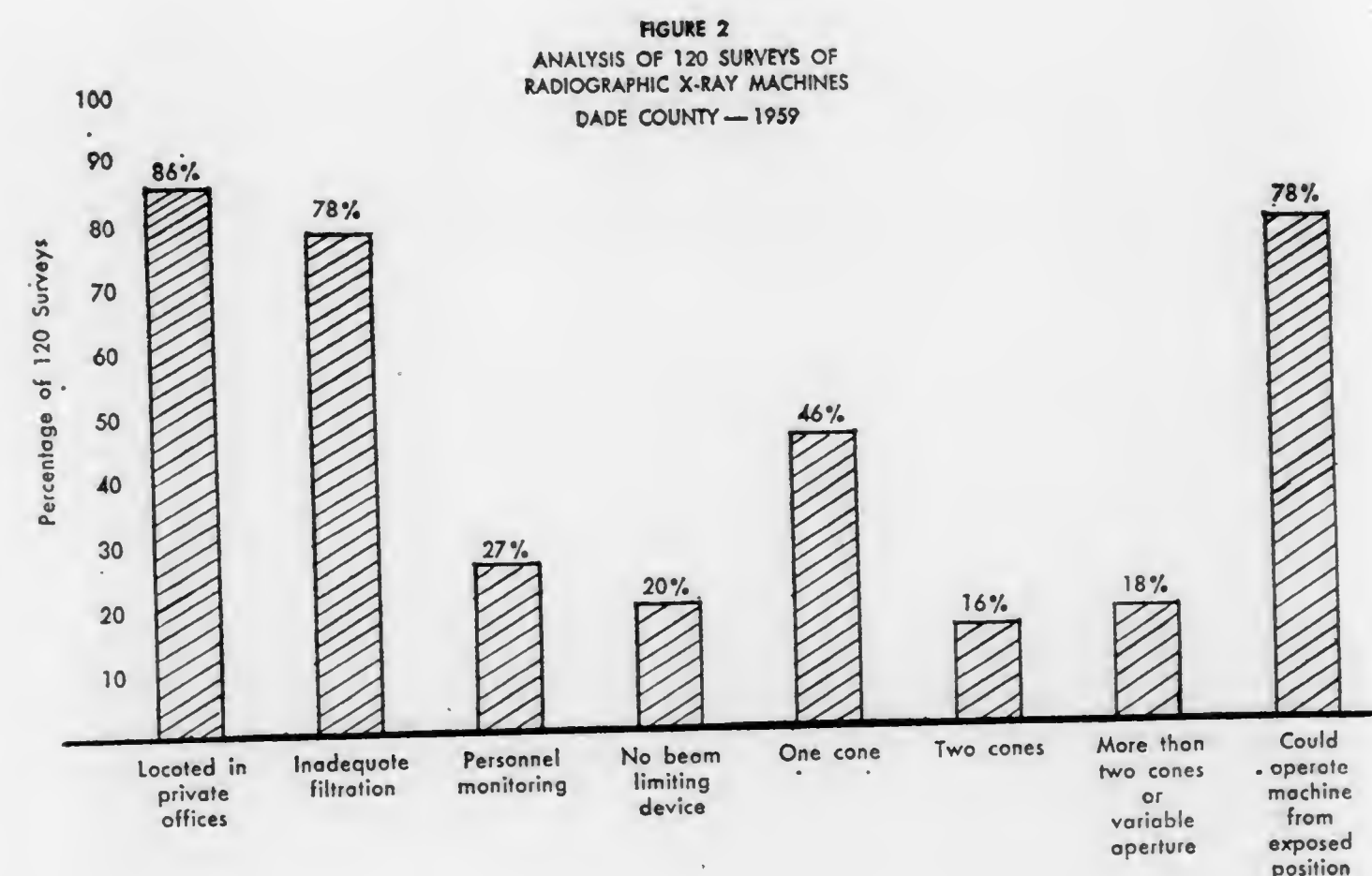
The survey also included 6 hospitals in various parts of the state, 5 mobile photofluorographic units and the X ray equipment in 1 correctional institution. Analysis of the data has not been completed but

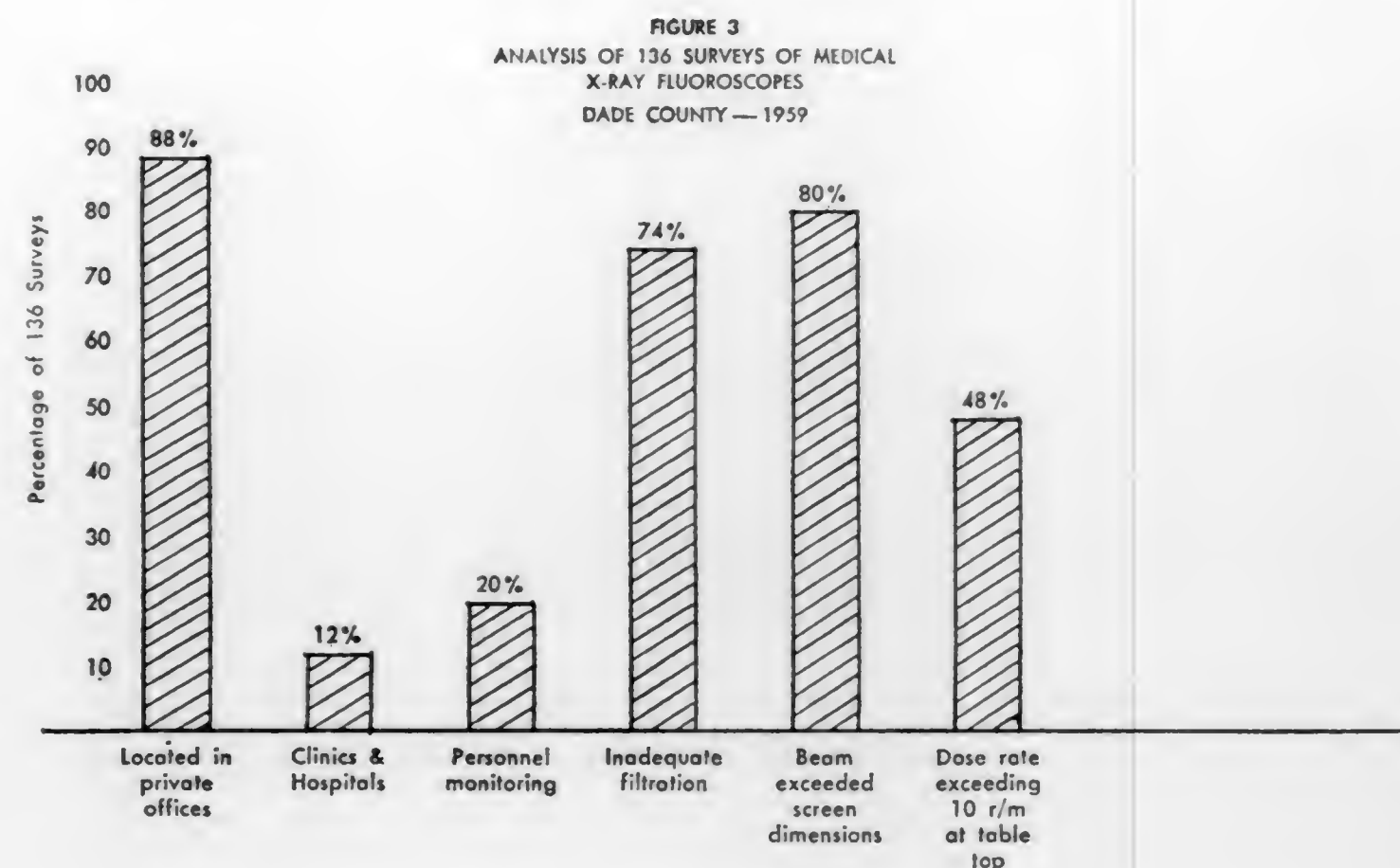
the following generalized statements seem warranted from a study of more than 60 per cent of the 395 machines surveyed. Three-fourths of them were found to be without adequate beam filtration; one-fifth had no beam limiting device, about 60 per cent had 1 or 2 cones, only about one-fifth had 3 or more cones; and in 80 per cent the machine could be operated from an unprotected position. These data are shown in the accompanying graphs.

Consultation was given to the Division of Hospitals and Nursing Homes, particularly in studying architects' plans for the radiology suites and isotope laboratories of proposed hospitals or proposed expansions.

PERSONNEL MONITORING SERVICE

Personal radiological monitoring by the film-badge method was operated as in previous years for state and local health personnel. The





operation of this program was assigned to this division during the latter part of the year. All regular State Board of Health radiation workers are covered by this program. The occasionally exposed are monitored by pocket electrosopes. During the year there was an increase from 84 to 97 personnel who took advantage of this service. Readings indicating excessive exposure are investigated and as a result improvements in equipment and technique have been instituted.

RELATED AND COOPERATIVE ACTIVITIES

In addition to the previously mentioned activities with the Florida Industrial Commission, members of the staff have accompanied representatives of the U. S. Atomic Energy Commission on their tours of inspection of people and institutions holding licenses to have and use radioactive materials. These visits enable the staff to meet and gain rapport with the users, become more familiar with the various uses of

these materials in the state and serve to strengthen good relations with the Atomic Energy Commission.

Close and increasingly profitable working relationships have been enjoyed with the Florida Nuclear Development Commission since its formation in 1957. The director of the division was made a member of the Radiation Health Committee of the Commission.

One of the staff has been retained as an active member of the National Committee on Radiation Protection and Measurements (a position he has held since 1946). This gives Florida an increased opportunity in the formulation of broad principles of radiation protection, many of which become national and state policy and all of which affect legislation and regulations for the control of radiation injury.

RELATED ACTIVITIES

Meetings Attended	10	Literature Distributed:	
Lectures Given	7	Occupational Health	40
Course in		Radiological Health	395
Radiological Health	1	Pamphlets on Pollen	57
Climatology Letters			
Answered	102		

DIVISION OF TUBERCULOSIS CONTROL

DWIGHT J. WHARTON, M.D.
Director

Tuberculosis in Florida in 1959 was characterized by a satisfactory continuation of the downward trend toward lower mortality and morbidity. The remarkable extent to which this has occurred is best appreciated by a review of tuberculosis, looking back over 60 years.

The earliest Annual Report of this state covers the years 1895-99. One page is devoted to "consumption" and states this disease was "of serious importance but that there was no available figure of record in Florida in reference to this malady." In that 5 year period 2094 deaths due to consumption were recorded, but other causes of death such as hemoptysis, fevers, marasmus, etc., are significant. Approximately 56 per cent of the consumption deaths were in individuals from 20 to 30 years of age. To show the importance of this disease as a cause of death we mention typhoid fever with 947 deaths was in second place. Heart disease, the leading cause of death today caused 863 deaths in that 5 year period. Incidentally one person is reported to have frozen to death. Another Annual Report states "active measures for clinical diagnosis and control of tuberculosis by the State Board of Health began in 1930." This consisted of diagnostic clinics in some 8 cities following the example of the Florida Tuberculosis and Health Association which established 3 clinics that same year. Forty-two cases of tuberculosis were found in examining 1008 individuals. In 1932 a full time tuberculosis clinician and a nurse were employed to operate the clinics and tuberculin testing was added to clinic activities. To LaBelle goes the honor of being the

first town in the state to have school children tested. Schools of other cities and counties were tested to a total of 5181 white and 4290 colored children from 5 to 20 years of age. Of these 11.8 per cent of the white and 18.4 per cent of the colored children were reactors.

In 1933 the clinic physician found 75 cases of tuberculosis in 884 white and 26 cases in 399 colored patients examined.

An X ray unit was added in 1936 which could be dismantled and moved from clinic to clinic. It used rolls of paper film taking 100 exposures on one roll which then had to be sent to New York to be developed. The time from X ray exposure to reading of the film was 2 to 3 months. In 1940 personnel at the State Board of Health designed and built a mobile trailer which housed a 35mm photofluorographic unit. The first tuberculosis hospital operated by the state was opened in Orlando in 1938.

This historic resume of early efforts to control tuberculosis is presented so that we can evaluate the progress which has occurred. Only 26 years ago a physician with his 5 senses, his stethoscope and a thermometer found tuberculosis in 8 per cent of the people who came to his clinics. One wonders if a 1959 physician with the same armamentarium could find 101 cases of tuberculosis if he examined the entire population of Florida. The "tools" which were nearly adequate in 1933 are totally inadequate today and tomorrow we must be prepared to use new "tools" to meet the challenge of diminishing returns in present case finding efforts.

MORTALITY

The sharp decrease this year in deaths due to tuberculosis continues the trend that has prevailed for many years. Table 23 contains data on mortality and morbidity. Some of the deaths were old cases, inactive many years, who died indirectly from tuberculosis due to pulmonary function impairment and subsequent heart failure. Additional deaths occurred in old cases whose disease had been inactive many years but when the life span ran out they were listed as dying of tuberculosis.

MORBIDITY

There were 1588 new cases of tuberculosis found this year with a case rate of 34.4. It must be explained that one cannot make direct comparison with the 2226 cases reported in 1958. Part of the difference is due to different counting procedures. In 1958 and for previous years cases were counted as newly reported cases if there was permanent transfer of residence of a previously known case from another state to Florida. In 1957 there were 179 such transfers all of whom had been previously counted in another state. These cases were not counted as new cases in 1959 although they are added to the case register and thus to the work load of the county and state health departments, and may eventually appear in mortality statistics. Another difference comes in recording atypical cases.

In 1958 they were counted as tuberculosis. These are counted separately this year since they enter into a research project. There is no change in the policy of isolation and treatment. Comparable data for 1958 and 1959 would be like this:

	1958	1959
New tuberculosis	2085	1588
Atypical disease	60	141
Cases received by transfer	81	260
	<hr/> 2226	<hr/> 1989

CASE FINDING

Operation of the survey units contained in the plan established in 1958 with further attempts to concentrate in high incidence areas. Surveys in Escambia and Palm Beach Counties were conducted with 4 units in each survey. Migrant surveys were conducted in January and February, with 26,409 films taken with 21 new cases found. New case yield per 1000 films was 0.5 compared to 0.74 in 1958 and 0.91 in 1957.

The total of 70mm films done by all state and local health service units was 617,879. Of these 492,168 films were done in counties of over 100,000 population.

Tuberculin testing is assuming an increasing role in case finding where there is planned follow-up of contacts. Palm Beach County has found 33 new cases as a result of 21,915 tuberculin tests done mostly on first and second grade pupils over a 4 year period. This yield of 1.5 new cases for each thousand tuberculin tests shows that a well planned tuberculin testing program is very productive in Florida. Similar satisfactory results were obtained in other counties.

DIAGNOSTIC X RAY SERVICES

The diagnostic X ray unit continues to operate in counties without such services and interpretation of X ray films is continued for local health services. Many counties have X ray facilities and films are received from these counties for interpretation. Total films received and interpreted in 1959 was 38,329 compared to 34,197 in 1958, and 25,686 in 1957. Results from this service were: 6337 films showed tuberculosis and 5007 showed other pathology.

CENTRAL TUBERCULOSIS CASE REGISTER

The Central Tuberculosis Case Register is a constantly changing record due to many factors. Much effort is expended in attempts to keep this register and County Health Department registers in agreement and up to date.

The Central Case Register has been separated into 2 sections for administrative reasons. The main register contains cases of tuberculosis

only. The second register contains cases in which atypical acid-fast mycobacteria have been identified, either as pure cultures or in cases where there is association with mycobacterium tuberculosis. This division was made primarily to assist in the research work being done here. There is no change in the policy in regard to the atypical cases as concerns their possible infectiousness and they will be considered infectious until it may definitely be stated otherwise. All cases where a diagnosis of tuberculosis has been made will be continued with that diagnosis. All cases where both *M. tuberculosis* and atypical acid-fast organisms are isolated are considered to have tuberculosis.

In the Central Register 27.0 per cent of the cases were considered active at the end of 1959 and 2.7 per cent questionably active. In 1958 these were 26.2 per cent and 3.4 per cent respectively. Of the active cases 51.6 per cent were hospitalized compared to 53.9 per cent in 1958.

Cases at home who have active disease have always presented a problem. Any person who has cavitation is classed as having active disease and when discharged they usually remain in this category for the remainder of their life span. The American Trudeau Society has a committee studying the problem of sputum negative cavitary cases and when they arrive at a decision one may expect a marked reduction in the number of cases at home who are classed as active, and at the same time have an increase in percentage of the remaining ones who have positive sputum. With this anticipated change numbers of active sputum positive cases will present a better comparison than the percentages of a larger total. Many of these patients are at home having been discharged with maximum hospital benefits and do not constitute a public health hazard. Data on these cases are found in table 26.

The work load of the State Board of Health and County Health Departments cannot be measured by the number of cases in the Register since cases inactive for 5 years have been removed. There are approximately 19,000 cases who have been removed from the Register and placed in a closed file. These cases are given follow-up with a recommendation for annual X rays.

TUBERCULOSIS HOSPITALS

The State Tuberculosis Board is now operating 3 hospitals with a combined capacity of 1450 beds. The census of these hospitals was 1276 at the end of 1959 compared to 1385 one year previous.

One historical event occurred in the closing in November of the Central Florida Tuberculosis Hospital at Orlando. This hospital was operated for 21 years and set the example for the 3 newer hospitals at Tallahassee, Tampa and Lantana. Due to the shorter hospital period now necessary the closing of the Orlando Hospital caused no delay in hospitalizing new cases of tuberculosis and no inconvenience is anticipated.

ACTIVITIES IN COUNTY HEALTH DEPARTMENTS

Isoniazid and PAS are supplied by the State Board of Health to County Health Departments to continue follow-up treatment of patients after they are discharged from the hospital. The nationwide trend to long-term chemotherapy is observed. Drugs are available regardless of the type of hospital discharge and an attempt is made to continue chemotherapy in all cases where benefit may be expected. The same drugs are available for home treatment of children and selected adults and for prophylactic chemotherapy where indicated. The Dade County Health Department is participating in a nationwide survey of isoniazid prophylaxis of children.

SPECIAL PROJECT REPORT — THE ATYPICAL ACID-FAST BACILLI

E. CHARLTON PRATHER, M.D.

This year has seen a considerable expansion of this special study supported by a research grant from the National Institute of Health. A full time physician-epidemiologist and secretary were added to the staff early in 1959. Protocols were prepared and plans initiated for extensive and detailed epidemiological and bacteriological investigations into the perplexing problem of infections due to the atypical acid-fast bacteria.

To facilitate regular surveillance of "atypical cases" and to provide a common depository for all records, a "central registry" was established in Jacksonville. This was maintained originally as a part of the Central Tuberculosis Case Registry. The constantly increasing number of cases demanded that the "atypicals" be separated into a distinct registry of their own. The "atypical case registry" continues to function under the direction of the Division of Tuberculosis Control but this separation of records from the regular tuberculosis case registry complements ideally the on-going research and additive data collection from the bacteriological laboratory, the tuberculosis hospitals and field investigations.

The separation of "typical" and "atypical" cases is reflected in the section on morbidity in this year's Annual Report. There were 306 new cases of infections due to these organisms reported this year. Approximately one-half of these have associated infection with *M. tuberculosis*.

The bacteriologic laboratory studies, begun in 1956 on a pilot basis, have been expanded considerably this year. Emphasis has continued in the realm of identification and characterization of this rather large group of acid-fast organisms. In all, 362 patient strains of atypical acid-fast bacteria have been studied during 1959. More than 70 per cent of these were classified as non-photochromogens, the Groups IIIa and IIIb.

The expansion of field epidemiological investigations and correlative studies have coincided with this growth of the overall program. To establish a baseline of knowledge concerning the previously identified "atypical cases" and therewith to better plan organized investigation into these

infections, the clinical histories and medical summaries of more than 300 cases were gathered into the central atypical case registry. Procedures were initiated for immediate reporting and the continual in-flow of up-to-date bacteriological and clinical data on newly identified cases from all state public health and tuberculosis laboratories, the State Tuberculosis Hospitals and the Veterans Administration Hospitals in Florida.

Plans were formulated for extensive field investigations. The protocol and format, which include suitable "controls" were undergoing pre-trials at the end of 1959. Concentrated collection of epidemiologic data from the field is anticipated for 1960.

The cooperating organizations which include the Bureaus of Preventable Diseases and Laboratories and the State Tuberculosis Hospitals have met on 2 occasions during the year for planning conferences. The last meeting, held late in 1959, was called for the purpose of planning a "Florida Conference on Atypical Mycobacterial Infections."

Correlative studies which have been completed in 1959 include several tuberculin testing surveys using PPD prepared by the U. S. Public Health Service from the Battey Strain (Group IIIa) atypical acid-fast bacillus. In cooperation with the VA Sarcoidosis Research Team stationed in Florida, the entire population of the Florida School for Boys at Marianna was skin tested with "typical" and "atypical" tuberculins and certain antigens prepared from pine pollen. More than 70 per cent of this group reacted positively (more than 8 mm. induration) to the atypical tuberculin (PPD-B); 20 per cent were positive to typical tuberculin (PPD-S). The population was subsequently X rayed by a State Board of Health survey unit. No active disease was uncovered.

Additional tuberculin surveys were conducted among the first and second grade school children in Pasco and Sumter Counties. In Pasco County, the original appeal yielded 69 per cent of the eligible children to be tested—6.9 per cent were positive to one or both antigens. A second appeal 2 weeks later yielded an additional 19 per cent of the population to be tested—9.9 per cent of these were positive. In all, 85 per cent and 97 per cent of the 1301 total white and Negro first and second grade enrollment, respectively, received the 2 tuberculins: 1.4 per cent were positive to PPD-S; 6.4 per cent were positive to PPD-B. The results from Sumter County were comparable; however, only 50.1 per cent of the eligible population was tested.

Though these studies in Pasco and Sumter Counties are not completed, 380 household contacts of the 89 index children have been examined. Skin tests, using both tuberculins, X rays and bronchial lavage have been used in follow-up. To date, 4 active cases of tuberculosis have been found.

That these organisms can be definitely pathogenic and cause a serious pulmonary (and other system) disease, not infrequently leading to the death of the host, is supported by many case histories. On the other hand, in almost as many instances they are found in the complete absence of any recognizable disease process. Obviously there are other,

possibly many, factors surrounding and/or initiating a pathogenic role of these bacteria in human disease. These are not known.

To date there is very little positive evidence regarding the source of these infections. Their mode(s) of transmission remains completely unknown. Most authorities feel that infection due to either of Groups I, IIIa or IIIb should be handled as a serious communicable infection, in a manner not differing from that recommended for tuberculosis—until such time as a better knowledge of their epidemiology would dictate differently.

TABLE 23
TUBERCULOSIS CASES REPORTED — CASE RATES,
DEATHS AND DEATH RATES BY COLOR, SELECTED YEARS
PER 100,000 POPULATION — 1920-1959

YEAR	Cases Reported	Case Rate	TOTAL DEATHS		WHITE		NONWHITE	
			Deaths	Rate	Deaths	Rate	Deaths	Rate
1959.....	1,588	34.4	226*	4.9*	161*	4.3*	65*	7.4*
1958.....	2,226	50.0	287	6.4	193	5.4	94	11.1
1957.....	2,414	56.8	257	6.0	165	4.8	92	11.5
1956.....	2,453	62.9	244	6.3	156	4.9	88	12.0
1955.....	2,253	61.8	281	7.7	175	6.0	106	14.6
1954.....	2,461	70.7	283	8.1	159	5.7	124	18.1
1953.....	2,424	77.9	303	9.7	171	6.9	132	20.7
1952.....	2,603	86.6	501	16.7	250	10.5	251	40.0
1951.....	2,590	89.3	518	17.9	279	12.2	239	38.7
1950.....	2,337	83.6	522	18.7	254	11.6	268	44.1
1945.....	..	..	708	31.1	339	19.7	369	66.2
1940.....	..	..	978	50.8	375	26.8	598	115.6
1935.....	..	..	908	56.0	395	34.3	513	109.4
1930.....	..	..	1,015	*68.6	432	41.3	583	134.0
1925.....	..	..	999	80.8	426	50.0	573	148.7
1920.....	..	..	1,016	102.3	423	64.3	593	176.8

*Preliminary date

**Data not comparable

infections, the clinical histories and medical summaries of more than 300 cases were gathered into the central atypical case registry. Procedures were initiated for immediate reporting and the continual in-flow of up-to-date bacteriological and clinical data on newly identified cases from all state public health and tuberculosis laboratories, the State Tuberculosis Hospitals and the Veterans Administration Hospitals in Florida.

Plans were formulated for extensive field investigations. The protocol and format, which include suitable "controls" were undergoing pre-trials at the end of 1959. Concentrated collection of epidemiologic data from the field is anticipated for 1960.

The cooperating organizations which include the Bureaus of Preventable Diseases and Laboratories and the State Tuberculosis Hospitals have met on 2 occasions during the year for planning conferences. The last meeting, held late in 1959, was called for the purpose of planning a "Florida Conference on Atypical Mycobacterial Infections."

Correlative studies which have been completed in 1959 include several tuberculin testing surveys using PPD prepared by the U. S. Public Health Service from the Battey Strain (Group IIIa) atypical acid-fast bacillus. In cooperation with the VA Sarcoidosis Research Team stationed in Florida, the entire population of the Florida School for Boys at Marianna was skin tested with "typical" and "atypical" tuberculins and certain antigens prepared from pine pollen. More than 70 per cent of this group reacted positively (more than 8 mm. induration) to the atypical tuberculin (PPD-B); 20 per cent were positive to typical tuberculin (PPD-S). The population was subsequently X rayed by a State Board of Health survey unit. No active disease was uncovered.

Additional tuberculin surveys were conducted among the first and second grade school children in Pasco and Sumter Counties. In Pasco County, the original appeal yielded 69 per cent of the eligible children to be tested—6.9 per cent were positive to one or both antigens. A second appeal 2 weeks later yielded an additional 19 per cent of the population to be tested—9.9 per cent of these were positive. In all, 85 per cent and 97 per cent of the 1301 total white and Negro first and second grade enrollment, respectively, received the 2 tuberculins: 1.4 per cent were positive to PPD-S; 6.4 per cent were positive to PPD-B. The results from Sumter County were comparable; however, only 50.1 per cent of the eligible population was tested.

Though these studies in Pasco and Sumter Counties are not completed, 380 household contacts of the 89 index children have been examined. Skin tests, using both tuberculins, X rays and bronchial lavage have been used in follow-up. To date, 4 active cases of tuberculosis have been found.

That these organisms can be definitely pathogenic and cause a serious pulmonary (and other system) disease, not infrequently leading to the death of the host, is supported by many case histories. On the other hand, in almost as many instances they are found in the complete absence of any recognizable disease process. Obviously there are other,

possibly many, factors surrounding and/or initiating a pathogenic role of these bacteria in human disease. These are not known.

To date there is very little positive evidence regarding the source of these infections. Their mode(s) of transmission remains completely unknown. Most authorities feel that infection due to either of Groups I, IIIa or IIIb should be handled as a serious communicable infection, in a manner not differing from that recommended for tuberculosis—until such time as a better knowledge of their epidemiology would dictate differently.

TABLE 23
TUBERCULOSIS CASES REPORTED — CASE RATES,
DEATHS AND DEATH RATES BY COLOR, SELECTED YEARS
PER 100,000 POPULATION — 1920-1959

YEAR	Cases Reported	Case Rate	TOTAL DEATHS		WHITE		NONWHITE	
			Deaths	Rate	Deaths	Rate	Deaths	Rate
1959.....	1,588	34.4	226*	4.9*	161*	4.3*	65*	7.4*
1958.....	2,226	50.0	287	6.4	193	5.4	94	11.1
1957.....	2,414	56.8	257	6.0	165	4.8	92	11.5
1956.....	2,453	62.9	244	6.3	156	4.9	88	12.0
1955.....	2,253	61.8	281	7.7	175	6.0	106	14.6
1954.....	2,461	70.7	283	8.1	159	5.7	124	18.1
1953.....	2,424	77.9	303	9.7	171	6.9	132	20.7
1952.....	2,603	86.6	501	16.7	250	10.5	251	40.0
1951.....	2,590	89.3	518	17.9	279	12.2	239	38.7
1950.....	2,337	83.6	522	18.7	254	11.6	268	44.1
1945.....	..	..	708	31.1	389	19.7	369	66.2
1940.....	..	..	973	50.8	375	26.8	598	115.6
1935.....	..	..	908	56.0	395	34.3	513	109.4
1930.....	..	..	1,015	*68.6	432	41.3	583	134.0
1925.....	..	..	999	80.8	426	50.0	573	148.7
1920.....	..	..	1,016	102.3	423	64.3	593	176.8

*Preliminary date

**Data not comparable

TABLE 24

NUMBER AND PERCENTAGE OF REPORTED TUBERCULOSIS CASES BY STAGE OF DISEASE, RACE AND SEX, AGE, AND SOURCE OF REPORT. FLORIDA 1958-1959

Stage of Disease, Race and Sex, Age, and Source of Report	1959		1958	
	Cases	Percent	Cases	Percent
TOTAL CASES.....	1,588	100.	2,226	100.
STAGE OF DISEASE				
Primary.....	75	4.7	80	3.6
Minimal.....	235	14.8	373	16.7
Moderately Advanced.....	518	32.6	716	32.2
Far Advanced.....	518	32.6	613	27.5
Non-Pulmonary.....	78	4.9	95	4.3
Unknown.....	164	10.4	349	15.7
RACE AND SEX				
White Male.....	743	46.8	1,075	48.3
White Female.....	278	17.5	476	21.4
Colored Male.....	358	22.6	416	18.7
Colored Female.....	202	12.7	235	10.6
Unknown.....	7	0.4	24	1.0
AGE				
Under 5.....	64	4.0	76	3.4
5-14.....	44	2.8	57	2.6
15-24.....	117	7.4	140	6.3
25-44.....	561	35.3	758	34.1
45-64.....	514	32.4	733	32.9
65 Plus.....	271	17.0	383	17.2
Unknown.....	17	1.1	79	3.5
SOURCE OF REPORT				
Health Department.....	971	61.1	1,493	67.1
Sanatoria.....	421	26.5	397	17.9
Private Physicians.....	30	1.9	36	1.6
General Hospitals.....	3	0.2	5	0.2
Death Certificates.....	52	3.3	56	2.5
Veteran's Hospitals.....	95	6.0	140	6.3
Florida State Prisons.....	12	0.8	12	0.5
Florida State Hospitals.....	2	0.1	2	0.1
Other.....	2	0.1	4	0.2
Out-of-State.....			81	3.6

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TABLE 25
RESULTS OF 70mm X-RAY SCREENINGS, AND 14" x 17" FOLLOW-UP FILMS
ACCORDING TO RACE AND SEX, AGE, AND COUNTY, FLORIDA, 1959

Race and Sex, Age, and County	70mm X-RAYS										14-in. x 17-in. X-RAY FOLLOW-UP FILMS												ALL FILMS		
	Total Films (a)	Percent of Pop. 18 Yrs. and over.	Definite or Suspected Tuberculosis	Other Pathology	Negative	Total Films	Percent Follow-up (c)	FINDINGS					NEW CASES FOUND					Active Old Cases	New Case Rate (d)	Hospitalization Recommended	Cardiovascular	Tumor	Other Pathology		
								New Cases	Old Cases	Suspected Tuberculosis	Other Pathology	Diagnosed Reserved	Negative	By Stage											
														Minimal	Moderately Advanced	Far Advanced	Primary & Unknown							Active and Prob. Active	Inactive and Prob. Inact.
GRAND TOTAL.....	617,879	22.4	7,798	6,311	603,770	6,228	79.9	316	542	405	2,679	636	1,651	77	113	102	24	272	44	258	50.3	47	3,433	1,052	4,506
MASS SURVEY X-RAY SCREENINGS WITH 14" x 17" FOLLOW-UP																									
SUB-TOTAL.....																									
RACE & SEX																									
White Male.....																									
White Female.....																									
Nonwhite Male.....																									
Nonwhite Female.....																									
Unknown.....																									
AGE																									
18-24.....																									
25-34.....																									
35-44.....																									
45-54.....																									
55-64.....																									
65 and over.....																									
Unknown.....																									
COUNTY																									
Brevard.....																									
Citrus.....																									
Columbia.....																									
Dade.....																									
DeSoto.....																									
Duval.....																									
Escambia.....																									
Flagler.....																									
Franklin.....																									
Gulf.....																									
Hamilton.....																									
Hardee.....																									
Hernando.....																									
Highlands.....																									
Leon.....																									
Levy.....																									
Marion.....																									

TABLE 24

NUMBER AND PERCENTAGE OF REPORTED TUBERCULOSIS CASES BY STAGE OF DISEASE, RACE AND SEX, AGE, AND SOURCE OF REPORT. FLORIDA 1958-1959

Stage of Disease, Race and Sex, Age, and Source of Report	1959		1958	
	Cases	Percent	Cases	Percent
TOTAL CASES.....	1,588	100.	2,226	100.
STAGE OF DISEASE				
Primary.....	75	4.7	80	3.6
Minimal.....	235	14.8	373	16.7
Moderately Advanced.....	518	32.6	716	32.2
Far Advanced.....	518	32.6	613	27.5
Non-Pulmonary.....	78	4.9	95	4.3
Unknown.....	164	10.4	349	15.7
RACE AND SEX				
White Male.....	743	46.8	1,075	48.3
White Female.....	278	17.5	476	21.4
Colored Male.....	358	22.6	416	18.7
Colored Female.....	202	12.7	235	10.6
Unknown.....	7	0.4	24	1.0
AGE				
Under 5.....	64	4.0	76	3.4
5-14.....	44	2.8	57	2.6
15-24.....	117	7.4	140	6.3
25-44.....	561	35.3	758	34.1
45-64.....	514	32.4	733	32.9
65 Plus.....	271	17.0	383	17.2
Unknown.....	17	1.1	79	3.5
SOURCE OF REPORT				
Health Department.....	971	61.1	1,493	67.1
Sanatoria.....	421	26.5	397	17.9
Private Physicians.....	30	1.9	36	1.6
General Hospitals.....	3	0.2	5	0.2
Death Certificates.....	52	3.3	56	2.5
Veteran's Hospitals.....	95	6.0	140	6.3
Florida State Prisons.....	12	0.8	12	0.5
Florida State Hospitals.....	2	0.1	2	0.1
Other.....	2	0.1	4	0.2
Out-of-State.....	—	—	81	3.6

TABLE 25
RESULTS OF 70mm X-RAY SCREENINGS, AND 14" x 17" FOLLOW-UP FILMS
ACCORDING TO RACE AND SEX, AGE, AND COUNTY, FLORIDA, 1959

Race and Sex, Age, and County		70mm X-RAYS										14-in. x 17-in. X-RAY FOLLOW-UP FILMS										ALL FILMS				
		FINDINGS					NEW CASES FOUND					NEW CASES FOUND					Active Old Cases									
		FINDINGS					NEW CASES FOUND					NEW CASES FOUND														
		Total Films (a)	Percent of Pop. 18 Yrs. and over	Definite or Tuberculosis	Other Pathology	Negative	Total Films	Percent (c)	New Cases	Old Cases	Suspected Tuberculosis	Other Pathology	Diagnosis Reserved	Negative	Minimal	Moderately Advanced			Far Advanced	Primary & Unknown	Active and Prob. Active			Inactive and Prob. Inact.	Hospitalization Recommended	New Case Rate (d)
GRAND TOTAL.....		617,879	22.4	7,798	6,311	603,770	6,228	79.9	816	542	405	2,679	685	1,651	77	113	102	24	272	44	258	50.3	47	3,438	1,062	4,506
SUB-TOTAL.....		295,369	11.4	3,582	3,195	288,592	2,781	77.6	81	237	175	1,322	362	604	19	34	25	3	74	7	67	30.0	32	1,798	564	2,155
RACE & SEX																										
White Male.....		105,669	10.3	1,780	1,182	102,707	1,400	78.7	30	119	91	732	181	247	6	12	9	3	29	1	26	30.2	21	495	270	1,149
White Female.....		114,042	10.4	1,096	1,003	111,943	863	78.7	11	64	33	427	102	226	5	5	1	1	7	4	6	10.2	8	546	166	718
Nonwhite Male.....		40,110	17.6	480	518	39,112	350	72.9	27	38	34	103	64	84	3	12	12	1	25	2	23	86.4	6	372	67	182
Nonwhite Female.....		28,605	11.7	188	437	27,980	147	78.2	12	14	16	45	15	45	1	5	3	1	12	1	11	48.9	2	347	52	23
Unknown.....		6,943	.....	38	55	6,850	21	55.3	1	2	1	15	2	2	1	1	1	1	1	1	15.6	.....	.....	88	9	.....
AGE																										
18-24.....		37,629	11.0	120	86	37,423	87	72.5	6	3	8	21	12	37	2	3	1	1	6	1	6	18.4	1	41	15	51
25-34.....		58,568	10.4	227	186	58,155	162	77.4	10	11	13	56	20	52	2	3	4	1	10	3	9	19.2	2	75	36	131
35-44.....		64,988	11.8	453	312	64,223	349	77.0	31	40	37	231	34	88	8	12	10	1	28	3	26	52.3	3	136	56	240
45-54.....		59,392	13.3	660	531	58,201	516	78.2	13	60	30	231	56	126	4	7	2	1	12	11	11	23.8	5	279	99	384
55-64.....		35,001	10.5	790	733	33,478	636	80.5	9	61	37	298	101	130	1	1	7	1	7	7	27.1	7	430	122	479	
65 and over.....		35,241	9.9	1,286	1,309	32,646	994	77.3	10	61	47	580	184	162	2	6	1	1	9	1	7	29.7	5	814	232	843
Unknown.....		4,550	.....	46	38	4,466	37	80.4	2	1	3	17	5	9	1	2	2	2	2	1	1	45.5	1	23	6	27
COUNTY																										
Brevard.....		11,058	16.0	78	64	10,916	23	29.5	0	3	2	13	2	3	0	0	0	0	0	0	0	.....	0	23	11	43
Citrus.....		1,358	24.0	22	20	1,316	16	72.7	0	2	1	8	2	3	0	0	0	0	0	0	0	.....	0	11	6	12
Columbia.....		2,278	18.6	34	36	2,208	27	79.4	1	0	4	13	2	7	1	0	0	0	1	0	1	43.9	0	25	1	23
Dade.....		20,733	34.4	173	160	20,400	94	54.3	2	9	2	64	5	12	0	1	0	0	2	0	2	9.6	1	64	27	133
DeSoto.....		3,793	49.5	66	53	3,674	46	69.7	0	7	10	24	2	19	0	0	0	0	0	0	0	.....	2	25	7	45
Duval.....		19,626	6.6	172	159	19,295	167	97.1	14	13	16	84	21	3	3	7	4	0	14	0	13	71.3	1	108	34	101
Escambia.....		22,060	20.1	200	194	21,666	188	94.0	17	12	2	13	20	124	9	7	1	0	14	3	14	77.1	0	126	32	49
Flagler.....		806	23.0	4	4	798	4	100.0	0	0	0	0	0	0	0	0	0	0	0	0	0	.....	0	0	0	8
Franklin.....		1,279	33.2	23	24	1,232	21	91.3	0	1	6	7	6	1	1	0	0	0	0	0	0	.....	0	16	4	12
Gulf.....		385	20.1	7	13	370	7	100.0	0	0	0	3	2	1	1	1	1	1	0	0	0	.....	0	0	0	8
Hamilton.....		1,868	30.0	17	18	1,838	16	94.1	0	0	0	5	4	2	0	0	0	0	0	0	0	.....	0	19	4	10
Hardee.....		1,170	22.5	22	25	1,123	16	72.7	0	3	2	9	2	4	0	0	0	0	0	0	0	.....	0	11	2	12
Hernando.....		1,549	16.7	10	21	1,518	6	60.0	0	1	1	0	4	2	1	0	0	0	0	0	0	.....	0	11	2	9
Highlands.....		1,617	22.1	28	13	1,576	43	46.4	1	6	1	23	9	2	1	0	0	0	1	0	0	21.0	0	34	7	42
Leon.....		4,771	38.0	67	60	4,644	42	62.7	1	1	1	44	7	18	0	2	0	0	2	0	2	19.3	0	76	36	59
Levy.....		10,384	19.3	84	127	10,173	80	95.2	2	1	1	5	4	12	3	0	0	0	0	0	0	.....	0	9	4	15
Marion.....		1,651	24.5	20	16	1,615	20	100.0	0	0	0	1	1	1	0	0	0	0	0	0	0	.....	0	52	14	63
Unknown.....		8,117	24.7	144	83	7,890	128	88.9	0	9	9	14	46	23	36	0	0	0	0	0	0	.....	0	0	0	0

TABLE 25 (Continued)

RESULTS OF 70mm X-RAY SCREENINGS, AND 14" x 17" FOLLOW-UP FILMS
ACCORDING TO RACE AND SEX, AGE, AND COUNTY, FLORIDA, 1959

Race and Sex, Age, and County	70mm X-RAYS				14-in. x 17-in. X-RAY FOLLOW-UP FILMS												ALL FILMS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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Martin.....	2,748	26.9	35	21	2,692	25	71.4	0	4	1	14	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

OTHER X-RAY SCREENINGS

SUB-TOTAL.....	322,510	14.3	4,216	3,116	315,178	3,447	78.9	235	305	230	1,357	273	1,047	58	79	77	21	198	37	191	71.3	15
Broward Health Dept.....	26,121	13.5	254	213	25,654	237	80.6	18	29	12	64	20	94	2	6	10	0	16	2	18	68.9	1
Dade Health Unit.....	22,674	3.7	499	245	21,930	606	94.4	25	26	4	336	53	162	5	12	8	0	25	0	22	110.3	3
Dade T. B. Ass'n.....	78,952	12.9	1,147	839	76,966	905	78.9	25	47	5	548	112	168	1	11	13	0	21	4	21	31.7	4
Duval Medical Center.....	8,315	2.8	37	139	8,139	NA	NA	9	9	1	3	4	23	3	3	3	0	8	1	8	108.2	1
Escambia Health Dept.....	8,317	7.6	73	91	8,153	54	74.0	9	9	1	3	4	23	3	3	3	0	8	1	8	108.2	1
Hillsborough Health Dept.....	38,922	15.6	552	313	38,057	251	45.5	43	40	67	54	3	44	22	9	11	1	33	10	32	110.5	3
Hillsborough T. B. Ass'n.....	18,411	7.4	139	120	18,152	43	30.9	5	3	14	10	0	11	5	0	0	0	3	2	2	27.2	0
Jacksonville Health Dept.....	25,780	11.0	543	280	24,957	412	75.5	37	47	17	116	23	172	2	12	18	5	37	0	36	143.5	3
Leon Health Dept.....	9,313	17.3	93	123	9,097	87	93.5	11	11	10	18	3	34	1	3	4	6	5	6	11	118.1	0
Orange Health Dept.....	25,306	15.0	204	194	24,908	153	75.0	26	*28	8	40	1	56	2	8	2	9	20	7	18	102.7	0
Palm Beach Health Dept.....	10,648	6.8	119	99	10,430	106	89.1	9	16	8	41	6	25	2	2	5	0	8	0	8	32.0	0
Pinellas Health Dept.....	25,037	10.2	291	196	24,550	240	82.6	8	29	7	51	16	55	1	2	2	0	9	5	2	66.1	0
Polk Health Dept.....	21,165	18.3	231	239	20,695	194	84.0	14	7	37	50	29	131	6	4	2	0	9	0	2	66.1	0
Sarasota Health Dept.....	3,549	8.1	34	25	3,490	31	91.2	0	8	0	0	0	16	0	0	0	0	0	0	0	0	0
State Unit, Jackson Mem.....	NA	.....	*153	NA	NA	128	83.7	5	5	0	61	9	48	0	4	1	0	5	0	0	0	0

(a) Excludes unsatisfactory films. Distribution by age, race and sex based on a 10% sample of film.

(b) Based on estimated 1959 population in area surveyed.

(c) Counties without follow-up excluded from totals.

(d) Rate per 100,000 satisfactory 70mm films.

(*) Excluded from total.

NA — NOT AVAILABLE

TABLE 26

COMPARISON OF TUBERCULOSIS CASE REGISTER STATISTICS
FLORIDA 1955-1959

Tuberculosis Cases by Activity, Location and Sputum Status	Number of Cases					Percent Distribution				
	1959	1958	1957	1956	1955	1959	1958	1957	1956	1955
TOTAL CASES IN REGISTER	10,918	12,404	12,758	11,893	10,821	100.	100.	100.	100.	100.
Active Pulmonary.....	2,942	3,250	3,832	3,875	3,631	27.0	26.2	30.0	32.6	33.5
Tuberculosis.....	299	419	627	688	768	2.7	3.4	4.9	5.8	7.1
Questionably Active Tuberculosis.....	7,225	8,307	7,944	7,048	6,209	66.2	67.0	62.3	59.2	57.4
Inactive Pulmonary Tuberculosis.....	261	250	181	168	107	2.4	2.0	1.4	1.4	1.0
Primary Tuberculosis.....	191	178	174	119	106	1.7	1.4	1.4	1.0	1.0
Non-Pulmonary Tuberculosis.....	2,942	3,250	3,832	3,875	3,631	100.	100.	100.	100.	100.
Hospitalized.....	1,517	1,750	1,930	2,022	1,979	51.6	53.9	50.4	52.2	54.5
At Home.....	1,425	1,500	1,902	1,853	1,652	48.4	46.1	49.6	47.8	45.5
ACTIVE PULMONARY CASES AT HOME.....	1,425	1,500	1,902	1,853	1,652	100.	100.	100.	100.	100.
Positive Sputum.....	238	259	390	394	328	16.7	17.3	20.5	21.8	20.0
Negative Sputum.....	651	726	683	856	769	45.7	48.4	36.0	46.2	46.4
Undetermined Sputum.....	536	515	829	603	555	37.6	34.3	43.5	32.5	33.6

NOTE: Of the above cases of M. Tuberculosis, 308 cases have had additional isolations of atypical acid-fast organisms. In addition to the above there are 141 cases reported in 1959 who have had isolations of atypical acid-fast organisms without M. Tuberculosis. This 141 is not included in the statistics on the tuberculosis case register.

TABLE 25 (Continued)

RESULTS OF 70mm X-RAY SCREENINGS, AND 14" x 17" FOLLOW-UP FILMS
ACCORDING TO RACE AND SEX, AGE, AND COUNTY, FLORIDA, 1959

Race and Sex, Age, and County	70mm X-RAYS					14-in. x 17-in. X-RAY FOLLOW-UP FILMS										ALL FILMS									
	Total Films (a)	18 Yrs. and over Percent of Pop.	Definite or Suspected Tuberculosis	Other Pathology	Negative	Total Films	Percent Follow-up (c)	FINDINGS					NEW CASES FOUND					Active Old Cases	New Case Rate (d)	Hospitalization Recommended	Cardiovascular	Tumor	Other Pathology		
								New Cases	Old Cases	Suspected Tuberculosis	Other Pathology	Diagnosis Reserved	Negative	Minimal	Moderately Advanced	Far Advanced	Unknown							Active and Prob. Active	Inactive and Prob. Inact.
Martin.....	2,748	26.9	35	21	2,692	25	71.4	0	4	1	14	4	2	0	0	0	0	0	0	0	0	10	5	20	
Monroe.....	4,391	11.9	45	47	4,299	43	95.6	2	1	7	11	3	19	1	1	0	0	0	0	0	0	26	9	23	
Okaloosa.....	919	25.1	16	11	892	15	93.8	1	4	3	4	2	1	1	0	0	0	0	0	0	0	5	3	7	
Palm Beach.....	35,241	22.4	418	396	34,427	358	85.6	9	39	12	141	89	68	0	0	0	0	0	0	0	219	89	229		
Pasco.....	8,188	14.8	60	35	8,093	52	86.7	1	7	4	19	5	16	0	0	0	0	0	0	0	21	8	25		
Pinellas.....	53,212	21.6	615	738	51,859	395	84.2	1	14	2	303	26	49	0	0	0	0	0	0	0	360	110	571		
Putnam.....	4,379	19.7	26	39	4,314	23	88.5	0	4	3	8	7	15	1	0	0	0	0	0	0	1	18	7	22	
St. Johns.....	7,321	33.7	102	85	7,134	73	77.5	2	13	2	40	7	15	1	0	0	0	0	0	0	5	41	11	73	
St. Lucie.....	8,766	37.7	90	69	8,607	49	54.4	0	10	6	20	12	1	0	0	0	0	0	0	0	4	37	4	48	
Seminole.....	7,002	20.5	108	75	6,819	74	68.5	2	16	10	27	8	21	0	0	0	0	0	0	0	1	49	18	35	
Sumter.....	2,207	26.6	51	15	2,141	38	74.5	1	6	10	20	5	4	0	0	0	0	0	0	0	2	10	8	22	
Volusia.....	20,590	25.1	363	231	19,996	339	93.4	1	24	12	185	42	75	0	0	0	0	0	0	0	1	90	3	22	
Wakulla.....	685	19.3	2	4	679	23	100.0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	3	0	1	
State Prison at Raiford.....	1,761	66.4	30	16	1,715	4	76.7	2	6	9	2	2	0	0	0	0	0	0	0	0	2	113.6	1	4	
State Correctional Dist., Marianna, Fla.....	896	54.8	5	4	887	4	80.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	
Fla. Farm Colony.....	1,151	62.0	4	6	1,141	4	100.0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	4	1	2	
Migrants (7 Counties).....	26,409	.....	441	323	25,645	344	78.0	21	24	29	148	37	85	2	1	11	0	18	3	17	79.5	224	56	191
OTHER X-RAY SCREENINGS																									
SUB-TOTAL.....																									
Broward Health Dept.....	26,121	13.5	254	213	25,654	237	80.6	18	29	12	64	20	94	2	6	10	0	16	2	22	68.9	1	105	39	133
Dade Health Unit.....	22,674	3.7	499	245	21,930	606	94.4	25	26	4	336	53	162	5	12	8	0	25	0	22	110.3	3	153	12	416
Dade T. B. Ass'n.....	78,952	12.9	1,147	839	76,966	905	78.9	25	47	5	548	112	168	1	11	13	0	21	4	21	31.7	4	435	161	791
Duval Medical Center.....	8,315	2.8	37	139	8,139	NA	9	9	1	3	4	28	3	3	3	0	8	1	8	108.2	1	56	6	77
Escambia Health Dept.....	8,317	7.6	73	91	8,153	54	74.0	9	9	9	3	4	28	3	3	3	0	8	1	8	108.2	1	56	6	77
Hillsborough Health Dept.....	38,922	15.6	552	313	38,057	251	45.5	43	40	67	54	3	44	22	9	11	0	33	10	32	110.5	3	161	64	142
Hillsborough T. B. Ass'n.....	18,411	7.4	139	120	18,152	43	30.9	5	8	14	10	0	11	5	0	0	0	8	2	0	27.2	0	60	23	47
Jacksonville Health Dept.....	23,789	11.0	543	280	24,357	432	73.3	37	47	17	116	23	172	2	12	18	5	37	0	36	143.5	8	158	10	228
Leon Health Dept.....	9,313	17.3	93	123	9,097	87	93.5	11	11	10	18	3	34	1	3	3	0	6	5	11	118.1	0	84	14	43
Orange Health Dept.....	25,306	13.0	204	194	24,908	153	75.0	26	28	8	40	1	56	2	2	5	0	20	7	18	102.7	0	82	51	101
Palm Beach Health Dept.....	10,648	6.8	119	99	10,430	106	89.1	9	16	5	41	6	25	2	2	5	0	8	0	8	84.5	0	54	13	73
Pinellas Health Dept.....	25,037	10.2	291	196	24,550	240	82.6	8	29	51	16	5	131	2	2	5	1	0	8	0	32.0	0	82	47	83
Polk Health Dept.....	21,165	18.3	231	239	20,695	194	84.0	14	7	37	50	29	57	6	4	2	2	9	5	2	66.1	0	130	29	130
Sarasota Health Dept.....	3,549	8.1	34	25	3,490	31	91.2	0	8	2	0	0	0	0	0	0	0	0	0	0	0	11	7	7	
State Unit, Jackson Mem.....	NA	.....	158	NA	NA	128	83.7	5	5	0	61	9	48	0	4	1	0	0	0	5	0	0	2	59

(a) Excludes unsatisfactory films. Distribution by age, race and sex based on a 10% sample of film.

(b) Based on estimated 1959 population in area surveyed.

(c) Counties without follow-up excluded from totals.

(d) Rate per 100,000 satisfactory 70mm films.

(*) Excluded from total.

NA - NOT AVAILABLE

TABLE 26

COMPARISON OF TUBERCULOSIS CASE REGISTER STATISTICS
FLORIDA 1955-1959

Tuberculosis Cases by Activity, Location and Sputum Status	Number of Cases					Percent Distribution				
	1959	1958	1957	1956	1955	1959	1958	1957	1956	1955
TOTAL CASES IN REGISTER	10,918	12,404	12,768	11,893	10,821	100.	100.	100.	100.	100.
Active Pulmonary.....	2,942	3,250	3,832	3,875	3,631	27.0	26.2	30.0	32.6	33.5
Tuberculosis.....	299	419	627	688	768	2.7	3.4	4.9	5.8	7.1
Questionably Active Tuberculosis.....	7,225	8,307	7,944	7,048	6,209	66.2	67.0	62.3	59.2	57.4
Inactive Pulmonary Tuberculosis.....	261	250	181	163	107	2.4	2.0	1.4	1.4	1.0
Primary Tuberculosis.....	191	178	174	119	106	1.7	1.4	1.4	1.0	1.0
Non-Pulmonary Tuberculosis.....	2,942	3,250	3,832	3,875	3,631	100.	100.	100.	100.	100.
Tuberculosis.....	1,517	1,750	1,930	2,022	1,979	51.6	53.9	50.4	52.2	54.5
At Home.....	1,425	1,500	1,902	1,853	1,652	48.4	46.1	49.6	47.8	45.5
ACTIVE PULMONARY CASES AT HOME.....	1,425	1,500	1,902	1,853	1,652	100.	100.	100.	100.	100.
Positive Sputum.....	238	259	390	394	328	16.7	17.3	20.5	21.8	20.0
Negative Sputum.....	651	726	683	856	769	45.7	48.4	36.0	46.2	46.4
Undetermined Sputum.....	536	515	829	603	555	37.6	34.3	43.5	32.5	33.6

NOTE: Of the above cases of M. Tuberculosis, 308 cases have had additional isolations of atypical acid-fast organisms. In addition to the above there are 141 cases reported in 1959 who have had isolations of atypical acid-fast organisms without M. Tuberculosis. This 141 is not included in the statistics on the tuberculosis case register.

TABLE 27
ANALYSIS OF CASES IN THE CENTRAL TUBERCULOSIS
CASE REGISTER

COUNTIES	Total Cases	Pulmonary Tuberculosis				Non-Pulmonary Tuberculosis	Active Cases			
		Active	Questionably Active	Inactive	Primary		In Hospital	At Home by Sputum Status		
								Positive	Negative	Undetermined
STATE.....	10,918	2,942	299	7,225	261	191	1,517	238	651	536
Alachua.....	249	47	6	190	4	2	24	4	9	10
Baker.....	16	4	—	12	—	—	2	—	1	1
Bay.....	131	40	2	88	—	1	24	4	4	8
Bradford.....	43	11	—	30	—	2	2	—	5	4
Brevard.....	140	40	2	90	5	3	20	5	8	7
Broward.....	478	138	6	309	19	6	71	7	37	23
Calhoun.....	25	6	1	18	—	—	5	—	—	3
Charlotte.....	24	8	—	16	—	—	2	—	3	3
Citrus.....	9	4	—	4	—	1	1	—	3	—
Clay.....	36	16	—	17	2	1	3	1	7	5
Collier.....	55	16	1	30	7	1	9	1	2	4
Columbia.....	79	28	1	48	1	1	18	2	3	5
Dade.....	1,933	485	72	1,276	44	56	285	56	90	54
DeSoto.....	20	11	—	9	—	—	3	1	2	5
Dixie.....	17	6	—	11	—	—	3	—	1	2
Duval.....	1,379	365	8	965	20	21	191	29	105	40
Escambia.....	432	101	24	294	7	6	64	8	12	17
Flagler.....	12	1	—	11	—	—	1	—	—	—
Franklin.....	17	6	—	10	1	—	4	—	—	2
Gadsden.....	78	13	1	63	1	—	8	—	3	2
Gilchrist.....	7	2	—	4	1	—	2	—	—	—
Glades.....	5	1	—	4	—	—	1	—	—	—
Gulf.....	22	6	1	15	—	—	6	—	—	—
Hamilton.....	39	18	—	21	—	—	6	—	5	7
Hardee.....	23	9	—	14	—	—	4	—	1	4
Hendry.....	19	8	1	9	1	—	4	—	3	1
Hernando.....	23	8	2	13	—	—	3	—	1	4
Highlands.....	62	18	3	34	3	4	5	—	3	10
Hillsborough.....	898	201	61	605	13	18	111	9	36	45
Holmes.....	20	6	2	11	1	—	2	—	2	2
Indian River.....	48	8	—	38	1	1	3	1	2	2
Jackson.....	112	19	2	90	—	1	7	1	4	7
Jefferson.....	15	3	—	12	—	—	2	—	—	1
Lafayette.....	4	3	1	—	—	—	—	1	1	1
Lake.....	147	51	3	90	1	2	22	2	18	9
Lee.....	103	21	1	75	4	2	6	3	9	3
Leon.....	187	43	1	132	7	4	34	1	2	6
Levy.....	29	10	—	18	1	—	4	1	2	3
Liberty.....	8	5	2	1	—	—	2	—	—	3
Madison.....	57	12	—	38	3	4	5	—	4	3
Manatee.....	98	37	—	59	1	1	17	2	8	10
Marion.....	110	39	2	63	6	—	15	3	14	7
Martin.....	57	16	2	34	2	3	8	—	4	4
Monroe.....	77	24	1	47	3	2	12	1	6	5
Nassau.....	52	12	3	33	—	4	6	—	1	5
Okaloosa.....	78	28	3	43	1	3	14	—	5	9
Okeechobee.....	15	7	1	6	1	—	6	—	1	—
Orange.....	452	105	2	333	5	7	63	5	30	7
Osceola.....	56	21	3	32	—	—	5	4	4	8
Palm Beach.....	544	150	11	347	28	8	82	10	45	13
Pasco.....	69	28	1	34	5	1	14	—	8	6
Pinellas.....	652	222	20	397	6	7	98	37	38	49
Polk.....	596	138	20	406	27	5	50	13	43	32
Putnam.....	106	27	5	71	2	1	12	1	4	10
St. Johns.....	101	31	—	67	1	2	13	2	6	10
St. Lucie.....	93	25	—	60	6	2	15	2	4	4
Santa Rosa.....	45	20	2	22	—	1	12	2	4	2
Sarasota.....	123	27	1	87	6	2	14	3	5	5
Seminole.....	105	46	1	55	2	1	21	7	8	10
Sumter.....	25	9	1	12	3	—	6	—	1	2
Suwannee.....	49	17	2	29	1	—	7	1	1	8
Taylor.....	30	9	1	20	—	—	4	—	—	5
Union.....	11	5	1	4	—	1	1	—	1	3
Volusia.....	245	67	10	159	6	3	32	7	18	10
Wakulla.....	16	5	1	10	—	—	3	—	1	1
Walton.....	32	5	—	25	2	—	4	—	—	1
Washington.....	28	11	1	16	—	—	5	1	2	3
Fla. St. Prison.....	52	13	—	39	—	—	9	—	1	3

DIVISION OF VETERINARY PUBLIC HEALTH

JAMES E. SCATTERDAY, D.V.M., M.P.H.
 Director

This division is responsible for those specialized activities related to the control of those animal diseases which are communicable to man. The division participates in the planning, supervision and coordination of activities designed to eradicate or control the animal diseases which are transmitted to man either by contact or indirectly through food products of animal origin or by arthropod vectors. Some of the major zoonoses receiving attention in 1959 were:

Brucellosis Five human cases were reported. Two were dairymen operating plan D dairies; one a swine farmer, one unknown but thought to be a dairy employee and the other a housewife whose titer of serum agglutinin did not substantiate the diagnosis. During the past year, 7876 herds consisting of 264,845 cattle were tested for brucellosis, disclosing 5179 reactors to the agglutination test which were destroyed and 106,545 calves were vaccinated with brucellosis vaccine. Twenty-nine North Florida counties have been modified-certified brucellosis-free and the 30th is under way.

The Florida Livestock Board passed a resolution adopting the brucellosis ring test as an official part of the Brucellosis Eradication Program. The milk ring test has been recommended and accepted throughout the United States, by the U. S. Livestock Association, the U. S. Department of Agriculture, and the U. S. Public Health Service. The Florida State Board of Health laboratories have been conducting the ring test since 1949 on an unofficial basis, and the action of the Florida Livestock Board makes this test official. Routine milk samples collected for bacterial and chemical analysis may be utilized for the brucellosis milk test except in the larger herds where a dilution factor enters in, and the herds must be broken down into units.

Bovine Tuberculosis 2949 herds consisting of 220,055 cattle, were tuberculin tested, and 477 bovine tuberculin reactors were disclosed. There has been a marked increase in bovine tuberculosis since 1956, as shown in the following figures.

Year	Herds	Cattle Tested	Reactors	Infected Premises
1956	2421	120,560	34	5
1957	2556	147,098	485	15
1958	3267	190,074	418	29
1959	2949	220,055	477	45

It is possible that the long interval of 6 years between testing, which is permitted by the U. S. Department of Agriculture to many State Health Departments, has made it possible for tubercular infection rates in cattle to increase. It is also probably true that many veterinarians have

erroneously assumed the disease to have been eradicated, and have been lax in rigorous testing for and destruction of infected cattle.

Eastern Equine Encephalomyelitis 61 cases in horses or mules were reported, and the incidence by county and month is indicated on Table 28. One human case of this disease was confirmed serologically and one other case was presumptive.

One hundred and thirty-five wild birds were collected of various species in the Pinellas County area and examined for viremia. All were negative to the test. Chicken bloods collected from various poultry plants have yet to be examined.

Leptospirosis This remains a very common disease of cattle, swine and dogs. One hundred and ninety cattle, 492 dogs, and 4 hogs were reported in 1959 to be leptospirosis infected. Those in cattle and hogs represent herd infections rather than individual cases. Twelve human infections of leptospirosis were confirmed by serology by the Bureau of Laboratories.

Mycotic and parasitic infections were possibly the most prevalent of the zoonoses. Ringworm, a mycotic infection of animals and man, was reported by veterinarians in 287 dogs, 198 cats and 2 horses. Hookworm, (*Ancylostoma braziliense* and *Acylostoma caninum*), although not reportable in animals, is widespread and the estimated infection rate in young dogs and cats may be as high as 70 per cent or better. *Creeping eruption*, caused by the larva of these animal parasites, remains a difficult and common infection of utility workers and children.

Three cases of human tapeworm were reported in 1959. Although these may be caused by eating raw or undercooked beef or pork infected with the tapeworm cysts, adequate meat inspection should eliminate this source. Humans may also be infected with the dog tapeworm by manually defleaing their pets and thus ingest the tapeworm embryo by oral contamination from their own fingers.

Rabies Compared to the 62 animal cases last year, there were 58 cases in 1959, involving 7 species (Table 29). There were no human cases or deaths. However, 448 people received Pasteur treatment, supplied by the State Board of Health, following animal bites, but only 32 were actually exposed to the rabies virus as demonstrated by laboratory analysis.

Human Exposure by Known Rabid Animals

Dogs exposed 19 humans				
Fox	"	1	"	
Raccoon	"	3	"	
Cat	"	2	"	
Cattle	"	2	"	
Hog	"	3	"	
Bat	"	2	"	

Vaccine distributed was as follows: Semple type (Brain tissue), 7-dose packages, 878; Duck-embryo, 7-dose packages, 17; and Hyper-immune serum, vials, 95.

One three-month old puppy exposed 11 of these people, including the owner's family, neighbors and the impounding officer. This puppy was exposed to rabies in Kentucky and brought to Florida by car as a family pet.

Rabies in animals was diagnosed and laboratory confirmed in 25 of the 67 counties and existed throughout each month of the year.

Wildlife accounted for 38 of the 58 animal rabies cases. The 2 cattle and 2 swine cases were also thought to be caused by exposure to rabid wild animals. Only 12 dogs and 4 cats may be considered as domestic rabies.

Rabies Diagnosis by Fluorescent Antibody A study, designed to evaluate the Fluorescent Rabies Antibody (FRA) test as a practical and rapid method of routine rabies diagnosis, has been in progress for the last 18 months. This new technique is being evaluated by comparing the diagnostic efficiency (sensitivity and specificity) of the FRA test with the two standard diagnostic tests (examination of Sellers' stained smears for Negri bodies and mouse inoculation) now in general use.

Of the total 884 fresh or frozen brain specimens examined, rabies virus isolates were obtained from 82 by mouse inoculation. The FRA test, which may be conducted in 7 hours, was in complete agreement with the results of mouse inoculation tests taking from 7 to 21 days. In contrast, the examination of Sellers' stained smears for Negri bodies gave a diagnostic efficiency of only 90 per cent.

These preliminary results are considered most encouraging in the search for a rabies diagnostic test that has both the speed of a simple slide examination of stained tissue and the accuracy of the longer biological assay in mice.

The division has continued to employ the full time service of a biologist in the investigation and control of wildlife rabies. The director of this activity for 5 years resigned in 1959 and his position and duties were assumed by a new biologist.

The bulk of the biologist's activities have been aimed at the control of those wild animal populations which have supported the major portions of the rabies in Florida for the past several years; primarily the raccoon and the fox.

Animal population estimates are made, and when this census indicates it might maintain an epidemic, steps are taken to reduce the number of the wild species by trapping and other means. Bat rabies, as shown by Table 29, remains a problem. Bats submitted by moss gatherers, and those which have attracted attention either because of abnormal behavior or by animal or human attacks, are examined. Studies to determine the role the bat plays in the overall rabies picture continues.

This activity is supported by a grant from the National Institute of Health.

The life cycle, reproduction and migratory habits of the raccoon are being studied to better understand the endemic rabies in this species.

MILK SANITATION ACTIVITIES

SAMUEL O. NOLES, B.S., M.P.H.

LEWIS W. WILLIS, B.S., M.P.H.

State Milk Consultants

A legislative Agricultural Services Committee made an extensive survey of milk sanitation activities by all regulatory agencies in Florida. A report of the findings of this committee early in 1959 revealed that 90 per cent of the routine dairy inspection work and practically 100 per cent of routine sampling of dairy products was being done by 61 sanitarians in County and City Health Departments. Approximately 9500 routine dairy farm inspections and 2300 milk plant inspections were made by these local sanitarians during this past year. In addition, they were responsible for the collection of 35,309 samples of milk products, which were submitted to State Board of Health, County and City Health Department laboratories. These laboratories performed 198,814 bacteriological and chemical tests upon the samples submitted, making these results available to the sanitarians and personnel of other regulatory agencies, who used them to evaluate their control programs. Health officers and milk sanitarians are of the opinion that basic and specific information concerning work being done by health departments on milk sanitation control programs should be furnished every legislator which would enable him to better analyze any legislation that might adversely affect the maintenance of safe milk for Florida's citizens.

During 1959, it was noticeable that definite trends are developing in the dairy industry within the state with which control personnel must keep abreast. These are: producing dairies continue to become larger; producing dairies are being forced to leave urban areas, due to encroachment of housing developments and advent of industry, and move further out from plants into the more rural areas; processing plants are becoming larger and more centralized, shipping processed milk by refrigerated transport to more distant distribution points.

These developments are resulting in greater interdependency of control personnel in any given area of the state upon the programs being conducted by personnel of several other areas. In the past, a tendency has been observed on the part of a few rural areas that since all of the milk being produced in a particular area is being processed in a distant plant, personnel in the production area have little responsibility for quality control of production. These conditions are now changing so drastically that each area of production *must* be supervised closely by control personnel within that local area. There are only a few counties where milk is actually being processed. Yet, pasteurized milk products are being delivered to every county in the state. On the other hand, there are a

number of counties where processing plants are located which scarcely receive any milk which is produced within the county. It has become increasingly apparent that there must be developed the closest cooperation obtainable between regulatory personnel of production and processing areas. If there is a weak link in *any one* of the several production areas flowing into a processing area, it can result in a serious breakdown in the quality of the products being processed and, subsequently, being shipped back to all production areas.

Realizing the importance of the above developments, the Milk Consultants, State Board of Health, maintain a Central Milk Registry. This registry consists of a cumulative ledger on each dairy and milk plant upon which is recorded all the inspection and laboratory findings. This information affords a comprehensive summary of the operation of each individual dairy and milk plant in the state. It is available to County Health Departments and is used to promote the free flow of milk to any part of the state.

Further steps are also being taken by the milk consultants to overcome the administrative and technical problems presented by a changing industry. A great deal of time has been devoted to coordinating the control programs of the various interdependent areas. This has been done by analyzing the needs and getting the personnel concerned together so that more comprehensive, coordinated efforts could be expended; checking the complete control programs in the various local areas and advising as to needed changes; field training of sanitarians on their local programs to help them develop uniform enforcement programs in line with those surrounding them; and encouraging participation of industry in field work.

TABLE 28
EASTERN EQUINE ENCEPHALOMYELITIS
YEAR 1959

COUNTY	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Alachua.....	—	—	—	—	—	2	—	—	—	—	—	—	2
Bay.....	—	—	—	—	—	1	2	—	—	—	—	—	3
Brevard.....	—	—	—	—	—	—	—	—	1	—	—	—	1
Dade.....	—	—	—	—	1	1	1	—	—	—	—	—	3
Dixie.....	—	—	—	—	—	1	—	—	—	—	—	—	1
Duval.....	—	—	—	—	—	—	1	—	—	—	—	—	2
Hillsborough.....	—	—	—	—	1	—	—	7	—	—	—	—	8
Jefferson.....	—	—	—	1	—	—	—	—	—	—	—	—	1
Levy.....	—	—	—	—	1	—	—	—	—	—	—	—	1
Manatee.....	—	—	—	—	—	1	—	—	—	—	—	—	1
Okeechobee.....	—	—	—	—	—	—	—	1	—	—	—	—	6
Orange.....	—	—	—	—	3	2	—	—	—	—	—	—	4
Palm Beach.....	—	—	—	—	—	4	—	—	—	—	—	—	1
Pasco.....	—	—	—	—	—	1	—	—	—	—	—	—	2
Pinellas.....	—	—	—	—	—	—	—	1	—	—	—	—	18
Polk.....	—	—	—	1	2	6	2	—	—	4	—	—	2
Seminole.....	—	—	—	—	1	—	—	—	—	—	—	1	2
Suwannee.....	—	—	—	3	—	—	—	1	—	—	—	—	4
Total Cases.....	—	—	—	5	9	19	7	10	1	5	4	1	61

TABLE 29

NUMBER OF CASES OF ANIMAL RABIES BY SPECIES,
COUNTY AND MONTH—1959

COUNTY & MONTH	Dog	Cat	Fox	Raccoon	Cattle	Bat	Bobcat	Pig	Total
TOTALS....	12	4	10	20	2	7	1	2	58
Alachua.....		1							1
Brevard.....			1						1
Citrus.....				1					1
DeSoto.....				6					6
Duval.....						2			2
Gadsden.....	1								1
Hamilton.....			4	1					5
Hardee.....				1					1
Highlands.....				1					1
Hillsborough.....	2			2					4
Indian River.....				1					1
Jackson.....		1							1
Lee.....				3					3
Madison.....			1						1
Marion.....						3			3
Okaloosa.....	2		3		1			2	8
Okeechobee.....				1					1
Orange.....	1								1
Palm Beach.....	1								1
Polk.....				3					3
St. Lucie.....		1				1			2
Santa Rosa.....	1								1
Sarasota.....		1							1
Sumter.....						1			1
Walton.....	4				1		1		6
			1						1
MONTH.....	12	4	10	20	2	7	1	2	58
January.....	2		6	1					9
February.....	1		1						2
March.....	1	1		1		1		1	5
April.....	3		1	1	1			1	8
May.....	1	1	1	3		2	1		8
June.....	1			4	1				6
July.....			1	3		3			7
August.....				2					2
September.....	2	1							3
October.....				3		1			4
November.....		1		2					3
December.....	1								1

TABLE 30

CASES OF ANIMAL DISEASES REPORTED BY VETERINARIANS FLORIDA 1959

[illegible]

TABLE 29

NUMBER OF CASES OF ANIMAL RABIES BY SPECIES,
COUNTY AND MONTH—1959

COUNTY & MONTH	Dog	Cat	Fox	Raccoon	Cattle	Bat	Bobcat	Pig	Total
TOTALS....	12	4	10	20	2	7	1	2	58
Alachua.....		1							1
Brevard.....			1						1
Citrus.....				1					1
DeSoto.....				6					6
Duval.....						2			2
Gadsden.....	1								1
Hamilton.....			4	1					5
Hardee.....				1					1
Highlands.....				1					1
Hillsborough.....	2			2					4
Indian River.....				1					1
Jackson.....		1							1
Lee.....				3					3
Madison.....			1						1
Marion.....						3			3
Okaloosa.....	2		3		1			2	8
Okeechobee.....				1					1
Orange.....	1								1
Palm Beach.....	1								1
Polk.....				3		1			4
St. Lucie.....		1							1
Santa Rosa.....	1								1
Sarasota.....		1							1
Sumter.....						1			1
Walton.....	4		1		1		1		7
MONTH.....	12	4	10	20	2	7	1	2	58
January.....	2		6	1					9
February.....	1		1						2
March.....	1	1		1		1		1	5
April.....	3		1	1	1			1	8
May.....	1	1	1	3		2	1	1	8
June.....	1			4	1				6
July.....			1	3		3			7
August.....				2					2
September.....	2	1							3
October.....				3		1			4
November.....		1		2					3
December.....	1								1

TABLE 30

CASES OF ANIMAL DISEASES REPORTED BY VETERINARIANS FLORIDA 1959

[illegible]

BUREAU OF LABORATORIES

NATHAN J. SCHNEIDER, Ph.D., M.P.H.
Director

ORGANIZATION AND PERSONNEL

There were no major organizational changes in the bureau during 1959; however, two important rearrangements of services were effected. One, those counties extending west from Jefferson to Escambia were authorized to send tuberculosis diagnostic specimens to the Tallahassee Regional Laboratory instead of to Jacksonville. Prior to this change, the Tallahassee laboratory, located in the W. T. Edwards Hospital, served as a combined tuberculosis hospital and state public health laboratory and limited its tuberculosis diagnostic work to the needs of the hospital. This change resulted in quicker and more efficient service to the counties in northwest Florida. The second change in service came about, in part, with the expansion of veterinary diagnostic service by the new State Livestock Board Laboratory in Kissimmee. This bureau performed approximately 21,000 fewer tests for leptospirosis and other veterinary diagnostic problems in 1959, as compared to 1958 because of the Kissimmee laboratory facilities.

The laboratory staff remained relatively stable during 1959. Two professional and one technical persons were employed in connection with 2 research grants from the Armed Forces Epidemiological Board, Commission on Enteric Infections and from the National Institutes of Health, respectively. Two members of our staff returned from educational leave following postgraduate training in public health.

The need to provide new laboratory quarters for the Tampa and Pensacola Regional Laboratories has become very critical. It had been reported in preceding annual reports that both laboratories are operating in antiquated buildings over 50 years old and in need of major repairs. Renovation of both of these buildings is not economically sound nor is it feasible without a substantial appropriation from the legislature. More appropriately, new buildings should be provided with funds from the sale of these properties, supplemented by a small state appropriation and matching federal funds.

In Jacksonville, there is an urgent need for more adequate laboratory facilities to meet the requirements for modern virological diagnostic services. This need was recognized at the time the present facilities were planned, but due to budgetary limitations, adequate animal quarters and virus laboratory facilities were not provided. During the current year, it has become apparent that the demands for virological diagnostic laboratory service has grown tremendously because of the increased awareness of suspect cases of human poliomyelitis, influenza and viral encephalitides.

DIAGNOSTIC SERVICES

The nature and number of general diagnostic services continued throughout 1959 as in the previous year. The total number of examinations as indicated in Table 31 increased moderately to 2,654,266; representing a marked upsurge of 33 1/3 per cent in the Orlando Regional Laboratory and smaller increases in Tampa, Pensacola, Tallahassee, West Palm Beach, Daytona Beach and Pinellas County laboratories. Jacksonville and Miami experienced a small decrease. Again, as was recorded in the annual report for 1958, a major increase was noted in the field of bacteriology for both drinking, and pollution water samples; a total of 116,750 and 88,754 examinations respectively were made. The increased demand for the services was met with no additional staff and thus placed a very difficult burden on those charged with performing milk and water bacteriological examinations. Because of the continued population growth in the state, it is expected that the demands will continue to increase and it is hoped that the bureau will be provided with necessary budgetary assistance to meet these needs.

There was a decrease of approximately 20,000 smear examinations for gonorrhea, mostly in the Tampa Regional Laboratory. This reduction, however, was offset by an increase of approximately 2500 in the number of cultures examined for *Neisseria gonorrhea*, the etiologic agent for gonorrhea. Inasmuch as the cultural procedure is more sensitive and productive, particularly in females, it would appear desirable to discard the smear test and substitute the culture; unfortunately, there are limitations imposed in the latter because of the nature of the organism. Such specimens must be cultured immediately after collection or with the use of a special carrying medium within a very few hours. For this reason, cultural tests can be made available only to the VD Clinics of health departments located in the immediate vicinity of the state laboratories. For physicians and other health units, the smear examination continues to be the only practical laboratory method to assist in the diagnosis of gonorrhea.

In the virology section of the Jacksonville laboratory, there was a marked decrease in the number of neutralization tests and a corresponding increase in the number of complement fixation tests. This change was effected by the availability of complement fixation antigens for the 3 types of poliomyelitis viruses. Thus, a simpler and more rapid procedure was substituted for the more expensive and time-consuming neutralization test. The complement fixing antigens for poliomyelitis viruses were furnished by the U. S. Public Health Service, Communicable Disease Center, as part of their surveillance assistance program.

The results of examinations for all laboratories are indicated in Table 31. In 1959, there was a total of 697,293 specimens submitted for standard serologic tests for syphilis, an increase of 13,453 above 1958. The proportion of specimens found reactive reversed the downward trend of previous years, 5.22 per cent in 1959 as compared to 4.47 in 1958.

There was a marked increase in the number of positive findings for typhoid and heterophile agglutination tests. In 1959, there were 507 specimens with positive titers for typhoid as compared to only 139 in 1958. Similarly, there were 479 blood specimens which tested positive for heterophile antibodies in 1959 as compared to 182 in the preceding year. The reasons for these differences are not apparent at this time.

The number of specimens found positive for diphtheria in 1959 increased from 67 to 124 over the preceding year. It is recorded with interest the finding of a cutaneous carrier of *C. diphtheria* who was a proven source of a large number of clinical cases. This individual carried the organism, not in the nose and throat, but in a large number of cutaneous lesions on the body. The epidemiologist must always be aware of different sources of contact in many diseases.

The total number of public health tuberculosis specimens reported to have been examined in 1959 was 41,199. In addition, there were 126,405 tuberculosis examinations in the State Tuberculosis Hospital Laboratories which are under the technical direction of this bureau. Considering public health specimens only, the proportion of positives dropped from 6.76 in 1958 to 6.05 per cent in 1959, continuing a downward trend started in 1953. Nevertheless, there remains yet a continuing reservoir of infection of tuberculosis among the general population.

Specimens submitted for the identification of Gram negative diplococci, particularly *Neisseria gonorrhea*, decreased in number from 55,178 specimens in 1958 to 44,745 in 1959. The proportion of positives increased from 10.1 per cent to 12.5 for the respective years, a disturbing increase in view of the major attention and effort given towards the control of venereal diseases for the past 2 decades.

The number of fecal specimens examined for enteric infections increased moderately over the preceding year. There were 88 isolations of *S. typhosa* and 290 other *Salmonella* in 1959, representing a decrease from 120 *S. typhosa* and 331 *Salmonella* during the preceding year. In contrast, the number of *Shigella* isolations increased from 89 in 1958 to 99 during the year of this report.

Examinations for human cases of leptospirosis yielded 12 cases during the year of this report. Paired serum specimens of patients with clinical aseptic meningitis of suspected viral etiology were tested routinely with leptospiral agglutination antigens. In most cases, leptospirosis had not been suspected. A similar experience of 15 cases was reported last year. These data emphasize the need for suspecting leptospiral etiology in cases of aseptic meningitis, particularly if the patient has had contact with animals such as cattle, swine and dogs.

In the miscellaneous examinations, the notable change is the marked increase in the number of darkfield specimens reported positive for *T. pallidum*, the etiological agent which causes syphilis. In 1959, a total of 72 were found; this is in contrast with 19 in 1954, 1 in 1955, 8 in 1956 and none in 1957 and 1958. This sudden increase in positives for this

year may be explained, in part, by the increased interest by the physicians in checking suspect lesions for the presence of *T. pallidum*, and in part by the fact that more primary cases of syphilis were seen during the early stages of the disease when there were manifest lesions. It is noted that all of the positives reported for 1959 were found in the Venereal Disease Clinic of the Dade County Health Department.

In the field of sanitary bacteriology, a very small increase in the number of dairy products submitted for examination to the laboratory was noted. In contrast, there was a sizeable increase in the demands for the bacteriological examinations of drinking and swimming pool water and pollution water surveys. A total of 81,482 drinking and swimming pool water samples as well as 6381 pollution water specimens were tested in 1959. As compared to 1958, this represented an increase of 16 per cent and 30 per cent for the respective types of samples. These figures reflect very vividly the growth of Florida, both population-wise as well as industrially.

The lactobacillus count service to the dentists in Florida continued on a statewide basis. The number of saliva specimens dropped from 2346 in 1958 to 1788 in 1959. No explanation is available at this time as to the reason for this decrease. This service was conducted in close cooperation with the Bureau of Dental Health; reports of lactobacillus counts were sent to the dentists through that bureau for their guidance and professional interpretation.

There was a small decrease in the number of fecal specimens submitted to this bureau for parasitological examinations. Whether this is the beginning of downward trend or whether this is merely a chance fluctuation remains to be seen. This service still represents a large volume of work for the laboratory. As in the past, hookworm, ascaris and pinworm (*Enterobius*) were the most commonly found animal parasites in the specimens examined. Insofar as malaria is concerned, 1959 marked the first year when there were no cases of this disease detected in the Bureau of Laboratories. This compared with 4 cases in 1954, 4 in 1955, 6 in 1956, 1 in 1957 and 1 in 1958. It has been suggested, and in part confirmed, that practically all of these cases were nonindigenous; i.e., the individuals were infected before moving to Florida — many while serving overseas in the Armed Forces.

In the chemistry laboratory, there was a substantial increase in the number of specimens examined. This increase was noted primarily in blood tests for sugar and cholesterol, specimens for toxicological and narcotics examinations, and drugs for barbiturates and amphetamines. In addition, the number of public water supply specimens submitted for complete chemical analysis increased by approximately 18 per cent.

A substantial decrease in the number of animal diagnostic specimens submitted to the Division of Veterinary Public Health was noted in 1959. As explained earlier, this decrease resulted from the greater usage of the Florida Livestock Board Animal Diagnostic Laboratory in Kissimmee by livestock owners. In prior years, the state laboratory had examined large

numbers of cattle blood for leptospirosis. Presently, we are accepting only those specimens of animals where zoonoses are suspected and only where possible human transmission is clearly apparent. By mutual agreement, however, all animals suspected of rabies infection or disease are examined in the public health laboratories.

Diagnostic services for viral and rickettsial infections continued at a very high level pace. As compared to 1958, there was a small decrease in the number of serological specimens examined; however, this was more than compensated for by the substantial, 28 per cent, increase in the number of specimens subjected to viral isolation attempts. Data regarding the overall diagnostic findings on 1017 patients are indicated in Table 33. As compared to the report of last year, there were fewer positive findings in 1959, particularly for poliomyelitis, Asian influenza and the ECHO group of viruses. Type 1 poliomyelitis was incriminated in 95 cases, as compared to 3 of type 2 and 6 of type 3 polioviruses; thus compared to 102 type 1, 10 type 2 and 16 type 3 for 1958. Two cases of Eastern Equine Encephalomyelitis were found serologically. (An outbreak of encephalitis in Pinellas County, probably attributable to St. Louis Encephalitis virus is not indicated in the tabulations for 1959, because the specimens were tested in 1960 and the laboratory findings will be reported in the next annual report.) There was only one Asian influenza viral isolation in 1959 as compared to 33 during the preceding year. Two cases of Influenza B were diagnosed serologically during the year under review. There was a completely different picture with regard to the ECHO and Coxsackie virus isolations during the past 2 years. In the year under review, a total of 28 ECHO's were isolated, predominantly type 4, although types 6 and 9 were also encountered. In 1958, the predominating type was ECHO type 9 (59 isolations) followed by ECHO type 4 (twice). Regarding Coxsackie in 1959, types A9, B2, B3, B4 and B5 were recovered from patients while in 1958 all except B2 were encountered. Coxsackie B5 predominated in 1958 while in 1959, types A9, B2 and B5, were found at the same relative frequency.

Over the past decade, this bureau has annually examined large numbers of specimens for a variety of pathogenic microbiological agents. In Table 34, there is presented the proportion of specimens found positive for selected diseases. While no firm conclusions may be drawn from these data as to the morbidity of these diseases in the population, there are certain trends indicated which tend to confirm epidemiological information available elsewhere as to the status of these diseases in Florida.

The state laboratories have examined annually an average of 700,000 blood specimens for syphilis during the past decade. The proportion of specimens found positive ranged from a high of 16.6 per cent in 1950 to 4.47 per cent in 1958. Between these years, there was a steady decline of the proportion of positives. In 1959, the per cent positives increased to 5.22. This trend would suggest that there were fewer cases of syphilis in Florida at the end of this decade than there were in 1950.

One sees a totally different situation with gonorrhea. The data presented herewith is based on the proportion of positive cultures performed on specimens obtained in the health department venereal disease clinics. An average of approximately 22,000 cultures were examined annually. The proportion of positives fluctuated annually; there was no trend apparent.

It is suggested that typhoid and diphtheria are established at a relatively low level in the community according to the data recorded in Table 34. The proportion of positive specimens in the laboratories fluctuated annually and there seemed to be no apparent trends.

Increased case finding efforts in tuberculosis may have contributed to the downward trend observed in the preparation of specimens found positive for tuberculosis during the period from 1950 through 1959. In addition, the availability of effective antituberculosis drug therapy played an important role in reducing the number of positive findings for *M. tuberculosis* in the laboratory.

The two animal parasitic infections of the intestinal tract, hookworm and ascaris, differed in their picture as indicated in Table 34. Hookworm, as a result of improved sanitation in and around the home, was observed less frequently in fecal specimens examined in the laboratory during the latter half of the decade. In contrast, the proportion of specimens positive for the ascaris roundworm fluctuated without any apparent trend.

The data as to the proportion of animals found positive for rabies indicate a cyclic pattern, with peaks in 1950, 1954, 1955 and 1957. In general, these upsurges in the proportion of positives resulted from isolated sporadic outbreaks in the wild animal population, particularly foxes and raccoons. Fortunately, there were no cases of human rabies in Florida during this past decade.

It was recorded in earlier annual reports of the cooperative program in the laboratory field established between the State Board of Health and the State Tuberculosis Board and its 4 hospitals. This arrangement has worked out efficiently and has contributed toward the success of the overall tuberculosis control program in Florida. A measure of the work performed by the hospitals may be had from Table 34. More than 62,000 examinations were made for the cultural diagnosis for tuberculosis and 5949 cultures of *M. tuberculosis* were tested for their susceptibilities to the commonly used antituberculosis drugs, isoniazide (INAH) streptomycin and paraaminosalicylic acid (PAS). This information is invaluable to the clinician in the management of his patient. The hospital laboratories performed a large number of other bacteriological and mycological tests. In the clinical sections of the hospital laboratories, there was much activity as evidenced by the 25,729 hematological examinations in blood specimens, 11,843 examinations for blood chemistry and 6821 complete urine analyses. Differences in numbers of examinations between hospitals are in part due to differences in patient capacity and to a lesser degree the differences in the use of the laboratory by the

clinician in the management of his patient. It is noted that the hospital in Orlando was closed the end of November, sending the remaining patients to the other hospitals. The bacteriologist in charge of the laboratory at that hospital was transferred to the Tampa hospital laboratory.

SPECIAL STUDIES

The Bureau continued its program of special studies during the period under review. Tables 31 and 32 list a wide variety of special projects with which we were concerned. Funds provided from outside sources to support these studies total approximately \$60,000.

The complete identification or typing of *Salmonella* cultures has become an established routine in the Jacksonville laboratory. As the *Salmonella* typing center for the state, 432 cultures were identified. During past years, this function was supported in part by funds from the Armed Forces Epidemiological Board; however, as of this year, the state assumed the cost of this work.

The bureau continued its research in rabies in 2 areas; viz., evaluation of the fluorescent antibody procedure for the rapid diagnosis of rabies in animals and the gathering of information as to the nature and extent of rabies in wild animals in Florida. With regard to the former, 665 animal specimens were examined by the fluorescent antibody (FRA) procedure and by routine smear and mouse inoculation procedures. The results compared very favorably, particularly between the FRA and the mouse inoculation tests. Resulting from this study, the bureau has now added the FRA test as part of routine examination of all animals submitted to the central laboratory. This procedure is not altogether applicable to animal heads received in the regional laboratories, because it requires that the brain tissue be kept and shipped in the frozen state to the Jacksonville laboratory. Further studies are being carried forward to determine whether smear preparations could be prepared in the regional laboratories, and preserved by a more practical means than freezing, pending shipment to Jacksonville. It does not seem economically feasible to provide the highly specialized and expensive optical equipment and difficult-to-prepare reagents for each regional laboratory at this time. Perhaps, as more experience is gained with the procedure, it will be found desirable to establish its use in the larger of the regional laboratories. This study was carried out by a Public Health Service veterinarian on loan to the State Board of Health for special training.

The collection and examination of wild animals continued as part of the search to determine the epidemiology of rabies. Particular emphasis was given towards the collection of racoons and foxes. (See the report of the Division of Veterinary Public Health elsewhere in this Report). The studies in rabies were supported in part with grant funds from the National Institutes of Health.

Staphylococcal phage typing continued on a special study basis during the past year. This service was offered to provide a marker for the identification of certain strains of staphylococci, thus assisting the epidemiologist in following the passage of a particularly virulent and possibly antibiotic resistant strain as it circulated in a hospital environment. During the year, a total of 3048 cultures of staphylococci were phage typed as compared with 1531 cultures in 1958. Whether this service was very productive is not certain. In most cases, the cultures tested were obtained from isolated lesions from hospitalized patients and insofar as is known, the information was not used epidemiologically. According to the current information available, no particular significance can be attributed to any staphylococcal strain according to its phage pattern and thus it is questionable as to the productivity of this test unless it is limited to epidemiological studies of a specific outbreak in a given situation. Other studies of the staphylococci included a limited investigation into the coagulase, penicillinase and toxin producing activity of this organism in order to develop more satisfactory diagnostic tools to measure its virulence or pathogenicity.

The urine count procedure was described in the last annual report and consists of the quantitative estimation of bacteria in a freshly voided urine specimen. This information is useful to the clinician in diagnosing urinary tract infections and disease and in following the patient during therapy. It would be desirable to establish this procedure in the hospital and private laboratory for use when needed. This bureau has helped initiate this procedure in several hospital and private laboratories and would welcome giving similar assistance to others upon request.

Special studies concerned with the epidemiology of pulmonary diseases associated with atypical acid-fast bacilli belonging to the genus *Mycobacteria* were continued. The laboratory centered its efforts on the characterization of the acid-fast bacilli cultured from patients and assisted the investigator in the Bureau of Preventable Diseases in his epidemiological studies. Much of the laboratory work was carried out at the Southwest Florida Tuberculosis Hospital Laboratory in Tampa. This study is supported, in part, by a grant from the USPHS. (See report of the Bureau of Preventable Diseases elsewhere in this Report).

Several new culture media were subjected to limited evaluation tests to determine their efficacy in the laboratory. This is done routinely when knowledge of the availability of newer procedures and/or culture media became available. Limited studies in the use of the millipore filter as a means for the bacteriological testing of water was carried out also.

Two research projects were carried out in the Miami Regional Laboratory. One study which is in the field of tuberculosis bacteriology has been in progress for the past several years. It is a cooperative project with the University of Miami and is concerned with the evaluation of the aerosol spray technic as a means of obtaining specimens from suspect tuberculosis patients who have difficulty in raising sputum or who shed tubercle bacilli so nominally that more sensitive test procedures are required. This study is supported in part by USPHS funds, and has indi-

cated the value of the aerosol specimen as an adjunct to the gastric lavage in hospitalized patients and as a substitute for the nonhospitalized patients. This technique is under consideration for use in the state tuberculosis hospitals.

The second study being carried in the Miami laboratory is supported by a grant from the Armed Forces Epidemiological Board and is concerned with studies of diarrheal disease in man. By special arrangement with the Pathologist in Chief, Peter Bent Brigham Hospital, Boston, autopsy specimens from young Guatemalan children with diarrheal disease have been made available for viral and bacteriological examination. Control specimens taken from children admitted to the hospital for reasons other than enteric disorders were also made available. Data obtained from this study may help in resolving the epidemiology of diarrheal diseases which is not clearly understood at this time. Also, the establishment of this study of viral diseases in the Miami laboratory will, when state funds are provided, serve as a nucleus for a public health virology section there.

CONSULTATIVE AND EDUCATIONAL SERVICES

The 8th Annual Medical Technology Workshop for Laboratory Technicians in Florida was held in Miami and Jacksonville. In Miami, separate courses were offered in clinical chemistry and hematology. Similar courses in parasitology and clinical chemistry were presented in Jacksonville. The workshop was carried out on a cooperative basis between the Universities of Florida and Miami, State Board of Examiners in the Basic Sciences and the Florida State Board of Health. This bureau contributed supplies and the time of several technical employees who organized and assisted in presenting the workshops.

The bureau offered technical and consultative guidance of the latest laboratory technical procedures by providing refresher training to several medical technologists in the state. Special training was provided for 4 foreign medical scientists who were brought to the United States by the World Health Organization. Medical and biological science college students were permitted to work in the laboratory during the summer months, thus providing an opportunity to learn firsthand about public health. A modest stipend was provided each student.

Visits to private and hospital laboratories for consultive reasons were available on a limited basis. This bureau has specific responsibilities to 51 private clinical laboratories registered with the State Board of Health and 189 laboratories which are approved for premarital and prenatal syphilis serology. A total of 8500 serology unknown specimens were distributed during 1959 as part of the evaluation procedure for approving such laboratories.

Consultive visits and inspections were made to 18 commercial dairy plants in order to examine and to certify their laboratories to perform dairy bacteriological and related tests in accordance with Standard Methods and USPHS requirements. Over the past several years, the dairy

industry has voluntarily requested and has received consultive services which has resulted in an increased level of proficiency and standardization in the performance of these special laboratory procedures. There was also active participation in the training of sanitarians and in the programming of a workshop for milk and water laboratory technicians.

A total of 9 members of this bureau were afforded the opportunity to take refresher training short courses offered by the USPHS. These were in the fields of virology, syphilis serology, fluorescent antibody microscopy, sanitary and milk bacteriology and the chemistry of narcotics and drugs. With the increased emphasis on research and the many discoveries applicable to the laboratory, it is most essential that the professional and technical persons continue to avail themselves of this opportunity to keep informed on the latest laboratory tools and procedures.

Revision as of January 1, 1959, of Previously Published List of Laboratories Approved for Premarital and Prenatal Serology.

REMOVED

Dr. Raymond Squires, 384 Brent Building, Pensacola

ADDED

Bio-Clinical Laboratory, 180 South Knowles Avenue, Winter Park
 Drs. Chambers and Peacock, 1902 Lowry Avenue, Plant City
 John R. Damron, M.D., 2034 E. Oakland Park Beach Boulevard, Ft. Lauderdale
 Division Hospital, Lake City
 Doctor's Clinical Laboratory, 450 S. W. 22nd. Street, Miami
 Drs. Dyrenforth, Eversole and Mullen, 1661 Riverside Avenue, Jacksonville
 Ft. Myers Medical Laboratory, 2136 McGregor Blvd., Ft. Myers
 Ed Frazier Memorial Hospital Laboratory, Macclenny
 Indian River Memorial Hospital Laboratory, 1840 25th Street, Vero Beach
 Kenaston Clinic, 501 Delannoy Avenue, Cocoa
 Lipscomb Medical Laboratory, P. O. Box 1731, Melbourne
 Louisiana Raulerson Hospital Laboratory, Okeechobee
 W. E. Manry, Jr., M.D., 417 Eleventh Street, P. O. Box 1161, Lake Wales
 Meridan Medical Laboratory, 1680 Meridan Avenue, Miami Beach
 Monaco Medical Laboratory, 112 S. Orange Street, Deland
 Murray Clinical Laboratory, 2304 Salzedo Street, Coral Gables
 Nassau General Hospital Laboratory, Fernandina Beach
 North Brevard Hospital, P. O. Box 490, Titusville
 North Miami Clinical Laboratory, 12490 N. E. 7th Avenue, North Miami
 Ormond Beach Hospital Laboratory, 264 So. Atlantic Avenue, Ormond Beach

Putnam County Blood Bank, 625 Laurel Street, Palatka
Rockledge Medical Center, 9 Orange Avenue, Rockledge
Drs. Storey and Neale, Clinical Laboratory Medical Building, 1—David
Blvd., Tampa
Sun Coast Osteopathic Hospital Laboratory, 2025 Indian Rocks Road,
Largo

* * * *

Cacciatore, R., and Dunbar, F. P. A bacteriologic study of resected lung tissue. School of Aviation Medicine, USAF, Report No. 58-120, April 1959.

Dunbar, F. P., McAlister, E., Jefferies, M. B. Catalase and peroxidase activities of isoniazid-susceptible and resistant strains of *M. tuberculosis*. Am. Rev. Tuberc., 79:669-671, May 1959.

Lewis, A. G., Jr., Dunbar, F. P., Lasche, E. M., Bond, J. O., Lerner, E. N., Wharton, D. J., Hardy, A. V., and Davies, R. Chronic pulmonary disease due to atypical mycobacterial infections. *Amer. Rev. Resp. Dis.* 80:188-199, August 1959.

Jefferies, M. B., Hardy, A. V., Schneider, N. J. The relative efficacy of culture media for the isolation of *Mycobacterium tuberculosis* from clinical material. School of Aviation Medicine, USAF, Report No. 59-94, Sept. 1959.

Jefferies, M. B., Schneider, N. J., and Hardy, A. V. A study of the neutral red test for the determination of the virulence of mycobacteria. School of Aviation Medicine, USAF, Report No. 59-54, Sept. 1959.

Simpson, C. F., Lewis, A. L., and Jaquette, D. S. Case Report—Equine encephalomyelitis in pheasants in Florida. *Avian Diseases*, 3:89-91, 1959.

TABLE 31
EXAMINATIONS PERFORMED BY LABORATORIES, 1959

[illegible]

TABLE 31 (Continued)
EXAMINATIONS PERFORMED BY LABORATORIES, 1959

	Jacksonville	Tampa	Miami	Pensacola	Tallahassee	Orlando	West Palm Beach	Daytona Beach	Pinellas County	Totals
VIRAL & RICKETTSIAL										
DIAGNOSTIC SERVICES										
Serology—Neutralizations	1,547									1,547
Isolations—Complement Fixation	29,684									29,684
Rabies—Microscopic	13,586									13,586
Rabies—Mouse Inoculation	1,332	1,180	522	812	94	288				8,728
SPECIAL PROJECTS	1,753									1,753
Salmonella Typing	2,592									2,592
Rabies—Fluorescent Antibody	665									665
Wild Animal Survey (Including Bats)	1,428									1,428
Monkey Viral Studies	4,207									4,207
Staphylococcal Typing	59,900									59,900
Staphylococcal Studies	2,456									2,456
Urine Count	2,600									2,600
Evaluation of Media	249	488								737
Tuberculosis-aerocol			2,964							2,964
Diarrheal Disease Studies			6,451							6,451

TABLE 32
SPECIMENS SUBMITTED FOR EXAMINATION BY FINDINGS

EXAMINATION	Number of Specimens				
	Positive Specimens		Negative	Unsat.	Total
	One or More Positive Findings	Positive for Findings Indicated			
SEROLOGY	35,804		650,512	10,977	697,293
Syphilis	890		3,323	235	4,448
Agglutinated & Related Tests		507			
Typhoid		13			
Typhus		58			
Brucellosis		4			
Tularemia		479			
Heterophiles		2			
Other					15,799
Blood Typings (Rh)					
DIAGNOSTIC BACTERIOLOGY	1,107		3,321	4	4,432
Diphtheria and Associated infections		124			
C. diphtheria		47			
Vincent's		257			
Streptococci		780			
Other					
Tuberculosis	2,263		35,169	3,407	41,199
Sputum		2,420			
Urine		23			
Gastric		101			
Spinal Fluid		2			
Other Fluids & Exudates		56			
Other		21			62
Animal Inoculation (guinea pig)					
Gonorrhea—Smears	26,018		18,359	368	44,745
Intracellular Gram Negative diplococci		5,542			
Extracellular Gram Negative diplococci		510			
Trichomonads		3,858			
Yeasts		2,449			
Vincent's Organisms		356			
Many Pus Cells		14,056			
Gonorrhea—Cultures	1,320		21,292	400	23,012
Enteric Infections	522		54,269	1,002	55,793
S. typhosa		88			
Other Salmonella		290			
Shigella (Flexner & Sonnei)		99			
Other		40			
Blood Cultures	31		218	2	251
Salmonella		0			
Other		34			
Leptospirosis	12		536	1	549
Miscellaneous	7,279		6,427	40	13,746
Darkfield—T. pallidum		72			
Chancroid—Ducrey's		27			
Granuloma—Donovan Bodies		16			
Gonococcus in eye		13			
Other eye smears		188			
Other eye cultures		72			
Urine Cultures		644			
Spinal Fluid Cultures		14			
Pleural Fluid Cultures		38			
Other Fluids & Exudates		2,630			
Mycological Examinations		1,155			
Organisms for Identifications		1,168			
Sensitivity Testing		328			
Other Examinations		919			
Misc. Special Services					327

TABLE 32 (Continued)
SPECIMENS SUBMITTED FOR EXAMINATION BY FINDINGS

EXAMINATION	Number of Specimens			
	Positive Specimens		Negative	Unsat.
	One or More Positive Findings	Positive for Findings Indicated		
SANITARY BACTERIOLOGY				
Dairy Products.....				31,073
Water, Drinking & Pools.....				81,482
Water, Pollution Surveys.....				6,381
Foods (Sanitary Quality Tests).....				633
Food Poisoning.....				565
Utensil Swabs.....				2,176
DENTAL CARIES BACTERIOLOGY				1,788
PARASITOLOGY				
Intestinal Parasites.....	23,484		100,500	4,177
Hookworm.....		8,938		
Ascaris.....		5,478		
Enterobius.....		3,892		
Trichuria.....		828		
Other helminths.....		168		
E. histolytica.....		208		
Nonpathogenic Ameba.....		4,752		
Flagellates.....		3,604		
Others.....		4		
Malaria.....			138	4
P. vivax.....		0		
Other.....		0		
CHEMISTRY				
Blood.....				28,056
Spinal Fluid.....				2,065
Urine.....				353
Water.....				1,038
Toxicology & Narcotics.....				1,635
Other.....				11,117
VETERINARY PUBLIC HEALTH				
Leptospirosis.....	40		660	94
Psittacosis.....	15		18	33
Other.....	88		153	16
VIRAL & RICKETTSIAL DIAGNOSTIC SERVICES				
Serology—Neutralizations.....				140
Complement Fixation.....				7,421
Isolations (except rabies).....				1,077
Rabies—Microscopic.....	*40		1,740	84
Dog.....		6		
Cat.....		4		
Cattle.....		2		
Fox.....		10		
Raccoon.....		16		
Bat.....		1		
Bobcat.....		1		
Mouse Inoculations.....				1,724
SPECIAL RESEARCH PROJECTS				
Salmonella Typing.....				432
Rabies—Fluorescent Antibody.....				665
Wild Animal (including bats (Survey)				
Rabies Virus Isolations.....	*7		426	433
Rabies Virus Serology.....	1		36	37
Bird Isolations for Arbor Viruses.....			135	135
Monkey Viral Studies.....				223
Staph Phage Typing.....				3,048
Staphylococcal Studies.....				689
Urine Count.....				104
Evaluation of Media.....				294
Tuberculosis—aerosol.....	134		854	998
Diarrheal Disease Studies.....				711
*Total positive rabies.....	47			1,219,400

TABLE 33
VIRAL AND RICKETTSIAL DIAGNOSTIC FINDINGS
BY PATIENT IN 1959

	Positive	Negative	Total
Lymphocytic choriomeningitis.....	20	501	501
Mumps.....	2	506	526
Eastern equine encephalomyelitis.....		558	560
St. Louis encephalitis.....		561	561
Herpes simplex.....	2	45	47
Poliomyelitis Type 1.....	95	478	573
Poliomyelitis Type 2.....	3	471	474
Poliomyelitis Type 3.....	6	470	476
Vaccinia—Variola.....		2	2
Murine Typhus.....	1	13	14
Rickettsialpox—Rocky Mt. Spotted Fever.....		15	15
Q Fever.....		98	98
Influenza A.....	1	45	46
Influenza B.....	2	44	46
Para—Influenza 2 & 3 (Hemadsorption 1 & 2).....	1	43	44
Psittacosis—LGV.....	1	30	31
Adenovirus.....	1	35	36
ECHO—(Type 4-21).....	28		28
(Type 6-1).....			
(Type 9-6).....			
Coxsackie—A-9-10.....	38		38
B-2-13.....			
B-3-2.....			
B-4-1.....			
B-5-12.....			
*Other.....		107	107
TOTALS.....	201	4022	4223

TABLE 34
PROPORTION OF SPECIMENS FOUND POSITIVE
BY LABORATORY EXAMINATION
1950-1959

Examined for:	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Syphilis.....	16.6	13.5	13.4	9.29	7.98	7.03	6.40	5.29	4.47	5.22
Gonorrhea.....	5.34	3.53	4.78	4.57	6.02	5.12	4.29	5.30	6.75	5.52
Typhoid.....	0.186	0.310	0.168	0.238	0.180	0.212	0.284	0.221	0.229	0.161
Diphtheria.....	2.35	1.52	2.56	3.72	2.85	2.73	3.38	6.42	2.03	2.80
Tuberculosis.....	14.1	16.4	16.5	14.2	13.8	11.7	10.6	7.80	6.76	6.05
Hookworm.....	18.9	14.3	12.4	11.2	12.2	9.97	8.04	7.83	8.09	7.21
Ascaris.....	3.31	3.81	4.08	4.52	5.15	3.89	3.54	3.81	4.47	4.42
Rabies (animal).....	14.7	3.72	3.21	4.13	8.67	7.85	4.79	7.70	3.04	2.25

TABLE 35
EXAMINATIONS PERFORMED IN**
TUBERCULOSIS HOSPITAL LABORATORIES, 1959

	Tampa	Lantana***	Orlando	Tallahassee***	Totals
Totals—Excluding Special Studies.....	47,617	35,984	19,623	23,181	126,405
Tuberculosis					
Diagnostic.....	22,139	19,722	9,560	10,981	62,402
Drug Sensitivity.....	3,136	1,078	918	817	5,949
Mycology.....	953	810	378	1,027	3,168
Miscellaneous Bacteriology.....	2,669	2,818	259	3,267	9,013
Hematology.....	7,619	8,019	5,297	4,794	25,729
Chemistry.....	7,317	2,066	1,408	1,052	11,843
Urine Analysis.....	2,937	1,468	1,498	918	6,821
Other.....	847	3	305	325	1,480
Special Studies					
Atypical T.B.....	5,000*				
C. albicans Tracer.....	1,196				
Agar Diffusion.....	191				
Niacin.....	2,381				
INH Serum Bioassay.....	4,221				

- * Approximately
 ** Operated under direction of Bureau of Laboratories; budgetarily supported by State Tuberculosis Board.
 *** Combined Regional Public Health and Hospital Laboratories.

BUREAU OF SPECIAL HEALTH SERVICES

L. L. PARKS, M.D., M.P.H.
 Director

The activities of this bureau have grown during the year because of more responsibility which has necessitated a small increase in the staff. Below is a brief summary of the activities of each of the sections and divisions in the Bureau of Special Health Services. A more detailed report is being submitted by each of the sections and divisions.

The Division of Hospitals and Nursing Homes has 3 principal responsibilities. A. *The licensure of hospitals.* It became mandatory in 1957 that all hospitals with 10 or more beds be licensed. Definite progress has been made but there are a few hospitals that have not yet been licensed because of failure to meet the minimum requirements. This program is a primary responsibility of the central office. B. *The licensure of nursing homes.* This has 2 principal responsibilities: 1. Inspection and licensing of the nursing homes through the County Health Departments; 2. An educational program for the administrators of homes and their staff. C. *The Hospital Service for the Indigent Program.* This is a hospital care program for the acutely ill or injured and consists of 2 parts. 1. Is financed by state and county and is for the medically indigent. 2. Is financed by state and federal funds and is limited to public assistance recipients. This program is a joint operation with the State Department of Public Welfare and began to function on October 1, 1959. The state-federal program is state-wide but the state-county financed program operates in those counties that match state funds. All but 5 counties of the state are participating in this program. They are: Lee, Washington, Jackson, Franklin and Gulf. The hospital care program is a most worthwhile program as it helps the counties take care of the hospital needs of those individuals that cannot pay their own way. A small amount of federal funds are available for the hospitalization of the Indians on the 3 Reservations.

The Division of Chronic Diseases consists of 3 sections: Cancer Control, Diabetes Control and Heart Disease Control. The cancer program is concerned with the early diagnosis of cancer through the 21 tumor clinics of the state, hospitalization of cases through the hospital care program, as well as an educational program for both lay and professional groups.

The heart program is similar to the cancer program in that it is concerned with operation of heart clinics in cooperation with the Florida Heart Association, home follow-up of cardiovascular cases through the County Health Departments and Visiting Nurses Associations, the operation of a rheumatic fever registry, special studies and an educational program for both lay and professional persons.

The diabetes program is concerned primarily with the early diagnosis of diabetes through surveys of the general population. It is aimed at encouraging the relatives of known diabetics to have annual blood sugar

TABLE 35
EXAMINATIONS PERFORMED IN**
TUBERCULOSIS HOSPITAL LABORATORIES, 1959

	Tampa	Lantana***	Orlando	Tallahassee***	Totals
Totals—Excluding Special Studies.....	47,617	35,984	19,623	23,181	126,405
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Diagnostic.....	22,139	19,722	9,560	10,981	62,402
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Mycology.....	953	810	378	1,027	3,168
Miscellaneous Bacteriology.....	2,669	2,818	259	3,267	9,013
Hematology.....	7,619	8,019	5,297	4,794	25,729
Chemistry.....	7,317	2,066	1,408	1,052	11,843
Urine Analysis.....	2,937	1,468	1,498	918	6,821
Other.....	847	3	305	325	1,480
Special Studies					
Atypical T.B.....	5,000*				
C. albicans Tracer.....	1,196				
Agar Diffusion.....	191				
Niacin.....	2,381				
INH Serum Bioassay.....	4,221				

- * Approximately
 ** Operated under direction of Bureau of Laboratories; budgetarily supported by State Tuberculosis Board.
 *** Combined Regional Public Health and Hospital Laboratories.

BUREAU OF SPECIAL HEALTH SERVICES

L. L. PARKS, M.D., M.P.H.
 Director

The activities of this bureau have grown during the year because of more responsibility which has necessitated a small increase in the staff. Below is a brief summary of the activities of each of the sections and divisions in the Bureau of Special Health Services. A more detailed report is being submitted by each of the sections and divisions.

The Division of Hospitals and Nursing Homes has 3 principal responsibilities. A. *The licensure of hospitals.* It became mandatory in 1957 that all hospitals with 10 or more beds be licensed. Definite progress has been made but there are a few hospitals that have not yet been licensed because of failure to meet the minimum requirements. This program is a primary responsibility of the central office. B. *The licensure of nursing homes.* This has 2 principal responsibilities: 1. Inspection and licensing of the nursing homes through the County Health Departments; 2. An educational program for the administrators of homes and their staff. C. *The Hospital Service for the Indigent Program.* This is a hospital care program for the acutely ill or injured and consists of 2 parts. 1. Is financed by state and county and is for the medically indigent. 2. Is financed by state and federal funds and is limited to public assistance recipients. This program is a joint operation with the State Department of Public Welfare and began to function on October 1, 1959. The state-federal program is state-wide but the state-county financed program operates in those counties that match state funds. All but 5 counties of the state are participating in this program. They are: Lee, Washington, Jackson, Franklin and Gulf. The hospital care program is a most worthwhile program as it helps the counties take care of the hospital needs of those individuals that cannot pay their own way. A small amount of federal funds are available for the hospitalization of the Indians on the 3 Reservations.

The Division of Chronic Diseases consists of 3 sections: Cancer Control, Diabetes Control and Heart Disease Control. The cancer program is concerned with the early diagnosis of cancer through the 21 tumor clinics of the state, hospitalization of cases through the hospital care program, as well as an educational program for both lay and professional groups.

The heart program is similar to the cancer program in that it is concerned with operation of heart clinics in cooperation with the Florida Heart Association, home follow-up of cardiovascular cases through the County Health Departments and Visiting Nurses Associations, the operation of a rheumatic fever registry, special studies and an educational program for both lay and professional persons.

The diabetes program is concerned primarily with the early diagnosis of diabetes through surveys of the general population. It is aimed at encouraging the relatives of known diabetics to have annual blood sugar

determinations in order to detect this disease early and place the patients under suitable treatment so as to prevent complications due to this disease. It is also concerned with lay and professional educational programs. Insulin is provided for indigent diabetics but funds for this is about half of what is needed.

The Accident Prevention program has had more emphasis this year. The bureau has been reorganized so as to enable the accident prevention consultant to give full time to this service. It is obvious that this field is in need of more study and more assistance.

The activities in the Civil Defense program have been limited because of lack of personnel, and no funds are provided for this program. Efforts have been made to stimulate the medical personnel concerned in each of the 6 Civil Defense Operational Areas of the state. These efforts have been limited primarily to participating in workshops, working with the State Civil Defense Director and trying to keep the State Board of Health set-up up-to-date because of changes in personnel from time to time. Efforts have been made to place state and county employees in the principal positions on the Table of Organization. It is believed that state and county employees should have a certain amount of responsibility in Civil Defense because they are public employees. Civil Defense should be ready to function in case of natural disaster and not necessarily be restricted to serving only when a disaster is due to an enemy attack.

DIVISION OF HOSPITALS AND NURSING HOMES

JOHN L. ENYART, M.D.
Director

HOSPITAL LICENSURE PROGRAM

At the close of calendar year 1959 this division had completed 30 months' experience in administration of Florida's first mandatory hospital licensing law. The last 12 months of this period were marked by accelerated progress.

The division received much valuable and helpful guidance and assistance from the Advisory Hospital Council for the hospital licensing program: Hon. James H. Sweeny, Jr., William W. Richardson, M.D., Messrs. Autha W. Forehand, John F. Wymer, Robert B. Eleazer and Raymond H. King, M.D. During the year the Council revised hospital licensing standards. Although this involved some elevation of standards, it also clarified many licensing requirements which had previously been subject to misinterpretation. The revised standards subsequently were approved and adopted by the State Board of Health, becoming effective on September 8, 1959.

Throughout 1959 evaluations of hospitals against licensing standards were continued by the hospital consultants of this division with the cooperation of physicians, public health nurses and sanitarians of County Health Departments. Priority attention was given to those hospitals who

were encountering difficulty in conforming to licensing standards. As necessary, repeated consultations were undertaken in an effort to extend these institutions all possible assistance in their self-improvement programs.

The results of these surveys and consultations provided, in the main, cause for encouragement. Substantial improvements over conditions prevailing in 1958 were found in the majority of the hospitals surveyed.

HOSPITAL EVALUATION ACTIVITIES, 1959

Number of hospitals and related institutions surveyed	181
Number of institutions found ineligible for classification as hospitals	6
Number of institutions which voluntarily ceased operation in 1959	4 — 10
	— 171
Number of hospitals licensed in 1959	— 146
	—
Number of hospitals remaining to be licensed as of December 31, 1959	25
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The 25 unlicensed hospitals have been placed in a "license-deferred" status pending correction of major deficiencies and reappraisal by this division. It is anticipated that improvements completed in most of them during 1960 will qualify them for licensure.

Plans for 59 hospital construction projects were reviewed by the division's hospital consultant staff during 1959. These involved plans for 17 proposed new hospitals and plans for 42 proposed projects involving additions or major renovation. Not included in this activity were plans for hospital construction projects sponsored under the Hill-Burton program and reviewed by the Hospital Construction Department of the Florida Development Commission.

Educational activities in various areas of hospital construction, maintenance and operation were continued by the hospital consultant staff throughout the year. Activity in this connection included advisory consultation with hospitals and architects, participation in institutes, development and publication of guide materials and distribution of educational literature offered by authoritative agencies and associations. This division also presented exhibits on disaster planning for hospitals at the conventions of the Florida Medical Association, the Florida Osteopathic Medical Association and the Florida Nurses' Association.

NURSING HOME PROGRAM

Continued emphasis was placed on an educational program designed for the promotion of self-improvement within the nursing home. In this connection, a short course for nursing home administrators was held at

Florida State University from July 27 through July 31, 1959, under the sponsorship of the Florida State Board of Health, Florida Nursing Home Association, U. S. Public Health Service, Florida State Department of Public Welfare and Florida State University. This institute was so enthusiastically received that separate formal courses are being developed for white and Negro nursing home operators to be held in June and July 1960.

A legislative change was made in the Nursing Home Licensing law, amendment to Chapter 400, Florida Statutes, providing for permanent licensure of nursing homes, homes for the aged and homes for special services. Formerly all licenses were required to be renewed annually. This is not interpreted as a de-emphasis in the nursing home program, as surveys at least annually will be made of all homes and discrepancies corrected as formerly under the regulations.

During the year an additional staff member was appointed to devote full time as consultant to the nursing home program.

This division has worked in cooperation with the County Health Departments in the licensure program of nursing homes, and as consultants have reviewed 22 plans for proposed new construction and 34 plans for proposed additions and/or renovations to existing nursing homes during 1959.

NURSING HOME EVALUATION ACTIVITIES, 1959

Number of nursing homes and related institutions evaluated	359
Number of homes that voluntarily ceased operation or were not licensed	32
Number of homes licensed	327
Total licensed bed capacity	8815

Through the County Health Departments this division has worked diligently in an effort to up-grade standards of existing nursing homes and to assure that all proposed new construction and conversion of existing structures are planned to meet optimum rather than minimum standards for licensure, with particular emphasis upon fire protection, safe building construction, sanitation and good nursing care.

The publication "LIVING IN LATER YEARS" continues to be issued bi-monthly by this division, being circulated primarily to nursing home operators.

HOSPITAL SERVICE FOR THE INDIGENT PROGRAM

This program was established by an act of the 1955 Florida Legislature. The members of the Advisory Committee for 1959 were: H. Phillip Hampton, M. D., Chairman; Edward Jelks, M. D., J. A. Long, Jr., M. D., Messrs. Frank Kelly, Arthur Bailey and Richard Simpson.

The medically indigent portion of this program, which went into effect on January 1, 1956, is state-county financed and administered. Its purpose is to provide hospital services for medically indigent persons who are acutely ill or injured. A major objective is to encourage all counties of the state to discharge their responsibilities toward these persons. Participating counties are required to annually appropriate funds in an amount equal to at least 50 cents per resident of the county. Matching funds are made available to participating counties by the state.

During 1959 every county in the state except Gulf participated. This means that 99.99 per cent of the population was covered. Franklin and Okaloosa began participating on October 1, 1959. Gadsden, Jackson, Lee and Washington did not participate during the last quarter of 1959.

The method of local administration of the program for the 66 participating counties is as follows:

- A. County Agency effecting participation:
 - 57 - Boards of County Commissioners
 - 7 - Hospital Boards of Trustees
 - 2 - County Welfare Departments
- B. County Agency responsible for determining indigency:
 - 27 - County Welfare Departments
 - 5 - Hospital Authority effecting participation
 - 34 - County Health Departments

The 1959 Florida Legislature, by amending Chapter 401, Florida Statutes, made it possible for the State Board of Health and the State Department of Public Welfare to reach an agreement whereby the cost of hospitalizing indigent patients who are public assistance recipients could be underwritten by state and federal funds. This group of patients are those receiving direct grants under the Old Age Assistance, Aid to Dependent Children, Aid to the Blind and Aid to the Totally and Permanently Disabled Programs of the State Department of Public Welfare.

The above was inaugurated on October 1, 1959 and relieves the counties of payment for indigent hospitalization for these categorically indigent patients who represented approximately 50 per cent of the original program. Accordingly, the 1959 Legislature reduced the state matching funds in the original program by 50 per cent.

The budgeted amounts for the biennium 1959-1961 are:

For Recipients of Public Assistance:

State appropriation	\$1,250,000	
Estimated federal matching	2,220,000	\$3,470,000

For Hospital Service for the Indigent:

State appropriation	2,000,000
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Total State and Federal Appropriation	\$5,470,000
Total County Appropriation	4,448,000
Total Program Appropriation	\$9,918,000

The amounts shown above illustrate that the new program will allow the counties a reimbursement of approximately 61 cents per capita, whereas the highest previous reimbursement has been slightly less than 50 cents.

As of December 31, 1959, 80 of the 146 hospitals participating had established per diem rates. The 66 remaining hospitals were reimbursed on a basis of actual billing not to exceed \$15.00 per day.

The average reimbursable cost of the 80 hospitals which have established per diems was \$24.51. This represents an increase of \$1.38 as compared to December 31, 1958.

The conditions for which hospitalization was provided most frequently were diseases of the circulatory system; diseases of the respiratory system; malignant neoplasms; delivery, complications of pregnancy, childbirth and puerperium.

The largest number of admissions for any age group was that of 65 years and over. They accounted for 26 per cent of total admissions.

HOSPITAL SERVICE FOR THE INDIGENT SUMMARY OF EXPENDITURES AND HOSPITALIZATION PROVIDED, JULY 1, 1958 — DEC. 31, 1958

Expenditures for hospital care	\$2,015,700.25*
State funds	915,221.70
County funds	1,100,478.55
Average cost per admission	204.43
Average cost per patient day	20.53
Admissions	9,860
Number of patient days rendered	98,186
Average length of stay in hospital	9.96

*Does not include direct payments to participating hospitals for:
426 Non-Resident Indigent Patients\$42,502.70
64 Indigent Indian Patients 7,929.14

NOTE: All figures above are for only first 6 months of fiscal year 1959 (July 1, 1958-Dec. 31, 1958).

DIVISION OF CHRONIC DISEASES

L. L. PARKS, M.D., M.P.H.
Director

DIABETES CONTROL

It is estimated that 2 per cent of the general population has diabetes and half of the cases are unknown to the patient. If this is true there are 46,000 undetected diabetics in Florida who would benefit greatly by discovery of their condition; knowledge would lead to treatment and treatment would mean amelioration of later consequences. Therefore, with this

in mind the case finding program continued to be concentrated on testing the blood relatives of known diabetics, and, in particular, the relatives of persons who are receiving a part or all of their insulin from the State Board of Health. The names of the brothers, sisters, parents and children are being obtained from known indigent diabetics. Arrangements are then made whereby these individuals can report to the County Health Department for a blood screening detection test. This type of survey was conducted in: Dade, Hendry, Glades, Highlands, Polk, Hamilton, Calhoun, Jackson, Washington, Holmes and Santa Rosa Counties. A total of 648 tests were made, and out of this number, 20 probable new diabetics were found.

The planning and carrying out of this type survey differs considerably from that of other types of general surveys. One obvious difference is the relatively small numbers of persons tested and the small number of counties covered. The feeling is that it is better to confine screening to that group of persons in which the highest per cent of unknown cases will be found. For example, surveys conducted in a community yielded .85 per cent new diabetics; in industry 1 per cent; among persons over 45 years of age 2 per cent; among the overweight 2.4 per cent; in a hospital or clinic 2.6 per cent; in a physician's office 2.7 per cent and among relatives 4.2 per cent.

Conducting a program jointly with the County Health Departments helps stimulate them to continue testing relatives of diabetics, without continued personnel assistance from the State Board of Health. The educational advantages of a project of this type are numerous. This is particularly true because it is possible to concentrate on persons most likely to become diabetic — namely, persons who are overweight, over 40 and related to diabetics. It is anticipated that by the end of 1960 one-third of the counties will be screening relatives of diabetics as a regular health department activity.

The search for unknown diabetics is also being conducted by the active lay diabetic societies in Florida. This is done in connection with National Diabetes Week. Civic organizations, military establishments and county medical societies likewise conducted screening surveys in Florida during 1959. The State Board of Health offers assistance to these groups in the way of consultation, publicity and supplies. No figures are available as to the exact number of new diabetics found by these organizations.

Insulin was supplied to 2741 individuals this year (2687 in 1958). A total of 30,097 vials of insulin were distributed at a cost of \$37,583.82. The funds available for insulin were found to be short by one-half of the actual need. The State Department of Public Welfare made available oral diabetes drugs to eligible diabetics under the Vendor Drug Payment Program of that agency. This enabled more diabetics to receive a greater supply of insulin through the Health Departments, since many of the indigent diabetics are now able to take the newer oral drugs.

General educational activities have been continued. The bulletin "Timely Topics" is issued as a monthly publication. Seven hundred names have recently been added to the mailing list, which now has a total circulation of 4200. The purpose of this bulletin is to help the diabetic learn

more about how to care for his condition and thereby supplement the information he receives from his family physician. A new leaflet designed especially for relatives of diabetics was printed and is entitled, "Are You Related to a Diabetic?" This leaflet proved to be in much demand and a second printing was necessary before the year ended. It is used extensively in connection with diabetic surveys.

In cooperation with the Florida Medical Association; the College of Medicine, University of Florida and the Florida Clinical Diabetes Association, assistance was given to a diabetes seminar held at Miami Beach in October 1959. There were 100 physicians who attended this meeting. One night during the seminar was open to the general public and the attendance was approximately 125.

In cooperation with the Heart Disease Program, a research project dealing with the relationship between diabetes and elevated blood cholesterol and heredity was continued. Diabetes was responsible for the deaths of 506 Florida residents in 1957, 611 in 1958 and preliminary figures show that 593 died from this cause in 1959.

Diabetes remains among the 10 leading causes of death in the state, and it is obvious more effort is needed on the part of the general practitioners of the state, the lay diabetic organizations and the State Board of Health to encourage the performing of diabetic blood tests routinely in the offices of the physicians, hospitals and clinics.

CANCER CONTROL

JAMES E. FULGHUM, M.D.
Director

The control of cancer is being approached in an aggressive, integrated program working in close coordination with the U. S. Public Health Service, the County Health Departments, the Florida Division of the American Cancer Society and the state and county medical societies.

During this year a physician was added to the staff of the Chronic Diseases Division of this bureau as a full time director of the Cancer Control section.

Cancer control effort is directed primarily to the field of service. The first line of defense in this field is the 21 tumor clinics located throughout the state and listed in Table 36. This table also shows *new* cancer cases and *all* cancer cases seen during 1958 and 1959. Two new clinics were added during the year; at Lee Memorial Hospital in Fort Myers and at the College of Medicine, University of Florida in Gainesville. The tumor clinics are staffed by private physicians who serve without compensation. The Florida Division of the American Cancer Society and the State Board of Health pay the salaries of certain other members of the staff of the clinics. In some instances volunteer workers assist in the operation of the clinics also without compensation. Much attention is being devoted to standardization of the tumor registries of the clinics which keep a

record of each cancer case from the time of diagnosis until the time of death.

The tumor clinics must meet the minimum requirements of the American College of Surgeons before financial assistance can be granted by the State Board of Health or the Florida Division of the American Cancer Society. These requirements embrace the assigned professional and clerical staff, records, the keeping of the tumor registry and the case follow-up system.

Medically indigent patients are referred to the tumor clinics by a physician or county health officer. These patients are first seen in the tumor clinic by the staff of physicians on an outpatient basis. Small fees are paid for diagnostic laboratory and X ray procedures by the State Board of Health. Table 37 shows a list of cancer control expenditures for outpatient diagnostic laboratory and X ray procedures, by counties, for 1958. If further studies are required for diagnosis, the patient may be admitted to the hospital.

If hospitalization is then required for treatment and the patient presents a reasonably good prognosis, he may then be admitted for the indicated therapy on the authority of the county health officer and the director of the tumor clinic. The hospitalization of such tumor patients is provided under the state and county program of Hospital Service for the Indigent or the program of the recipients of public assistance.

It is now necessary that all cancer cases be processed through an approved tumor clinic prior to hospitalization unless it is an emergency. A recent review of the records indicates that 91.5 per cent of all cancer patients hospitalized as medically indigent or as public assistance recipients were being processed through one of the tumor clinics.

Preliminary figures show that there were 7219 cancer-caused deaths in 1959, an increase of 580 over 1958. It is believed that there are about 19,000 cancer cases now living in Florida.

The education of lay and professional personnel continues to be supported by the State Board of Health and the Florida Division of the American Cancer Society. A Crossroad Cancer Seminar was held during March and April in Sarasota, Naples, Fort Lauderdale, Key West, Pensacola, Panama City, Live Oak and St. Augustine. A total of 196 physicians attended. A three-day cancer seminar for physicians is being planned for Orlando during 1960.

The Audio-Visual Library is continually procuring new visual aids on cancer for the use of lay and professional groups.

Statistical information on the subject of cancer is constantly being studied for trends. The marked increase in lung cancer, for example, presents a fertile field for lay and professional education and stimulates the support of research in this area.

In the field of research and special studies, the State Board of Health supports such projects as are approved by the Florida Cancer Council.

One such project will study the cytological cervical findings in women who are recipients of Aid to Dependent Children. Because cancer of the cervix is relatively prevalent in women of this socio-economic status and can usually be easily detected by a simple testing procedure, this project is being sponsored by the State Board of Health, Florida Cancer Council and the State Department of Public Welfare through a special grant from the USPHS. Such a project will reveal important statistical information, will save many lives and will point up education in the lay and professional groups on the value of frequent check-ups and early diagnosis.

A file on unusual and useless treatment of cancer is being built up. This information will be used from time to time for educational purposes and to answer the many questions received concerning unorthodox cancer treatments.

A revised cancer manual has been prepared and distributed to the tumor clinics, County Health Departments and other interested groups.

There are several problem areas which will require planning attention. The first of these is how to get the patient to the doctor early so that the malignancy can be discovered and treated before metastasis has begun. The solution to this, and this is a difficult one, is continued lay and professional education.

Another problem area is in treatment of the medically indigent patient when the county from which they are referred is not a participant in the Hospital Service for the Indigent program. This problem would be considerably greater were it not for the generosity and interest of many of the radiologists of the state who go ahead with the treatment of these patients in their own offices without compensation. The solution to this might be to go back to the previous system of separate monies for cancer cases.

One of the greatest problems facing the communities and the state is the care of the terminal cancer patient. There is little or no inpatient hospital care that can be offered them, unless they have a good prognosis for cure, or unless there is an acute medical or surgical emergency which requires hospitalization. The solution to this problem might be tackled on a community basis by designating a number of beds in each of the major hospitals of the state as cancer beds. Research might be done on these groups. It becomes apparent that they would be suitable for the testing of new drugs and other new type treatments.

Continued close cooperation has been maintained during the year with the Florida Division of the American Cancer Society, the Florida Cancer Council and other interested agencies in carrying out the Cancer Control Program.

TABLE 36
TUMOR CLINICS AND SERVICES

CLINIC	FIRST EXAMINATION		TOTAL VISITS	
	1958	1959	1958	1959
Alachua	58	41	169	100
Bay	52	49	558	559
Broward	74	108	451	505
Duval	420	397	3855	4162
Escambia	176	186	1305	1514
Fort Myers		44		51
Jackson Memorial	189	256	2258	2199
Leon	132	138	1074	1096
Manatee	27	17	264	209
Marion	20	40	39	43
Mt. Sinai	106	121	697	620
Orange	113	130	1464	1305
Palm Beach	148	175	961	1013
Pinellas	225	275	773	1009
Polk	174	194	1072	1269
St. Francis	83	73	744	785
St. Vincent's	77	84	1061	1103
Sarasota	37	28	223	204
Tampa	183	150	1844	1551
University of Florida		159		512
Volusia	20	20	109	30
TOTAL	2314	2685	18921	19839

TABLE 37
CANCER PROGRAM EXPENDITURES, 1959
FOR OUTPATIENT LABORATORY AND
DIAGNOSTIC X RAY PROCEDURES

County	Expenditures	County	Expenditures
State Total	\$12,130.17	Jackson	\$ 116.50
Radium	4,045.58	Jefferson	10.00
Outpatient Diagnostic	8,084.59	Lafayette	2.50
		Lake	224.25
		Lee	none
		Leon	85.50
Alachua	36.25	Levy	none
Baker	13.75	Liberty	17.50
Bay	595.90	Madison	62.25
Bradford	10.00	Manatee	160.75
Brevard	77.75	Marion	151.75
Broward	3.75	Martin	26.25
Calhoun	72.50	Monroe	411.50
Charlotte	6.25	Nassau	58.75
Citrus	none	Okaloosa	193.25
Clay	27.50	Okeechobee	72.50
Collier	93.75	Orange	1,160.50
Columbia	22.50	Osceola	99.00
Dade	2,099.75	Palm Beach	1,158.75
DeSoto	21.25		

Dixie	none	Pasco	53.75
Duval	914.70	Pinellas	41.25
Escambia	966.75	Polk	1,252.00
Flagler	none	Putnam	85.75
Franklin	13.75	St. Johns	none
Gadsden	89.25	St. Lucie	156.25
Gilchrist	none	Santa Rosa	169.75
Glades	133.75	Sarasota	43.75
Gulf	49.00	Seminole	403.50
Hamilton	27.50	Sumter	7.50
Hardee	77.07	Suwannee	13.75
Hendry	68.75	Taylor	52.00
Hernando	none	Union	none
Highlands	91.00	Volusia	7.50
Hillsborough	none	Wakulla	8.75
Holmes	33.00	Walton	118.75
Indian River	101.50	Washington	67.50

Note: The above table does not include the \$51,300 which was spent in support of the tumor clinics nor does it reflect funds spent on the hospitalization of cancer patients through the Hospitalization for the Indigent and the Public Assistance Recipients Programs.

During 1959 approximately 23,500 medically indigent and public assistance recipients were hospitalized for all causes. Eleven per cent of the total hospital admissions were suspected of having or proven to have had a malignancy. Cancer patients accounted for about 33,500 patient days of hospitalization at a cost of near \$675,000.

HEART DISEASE CONTROL

ROBERT J. JARRELL, M. D.
Associate Director

Heart disease is the leading cause of death in the United States and Florida today. In 1958 it was responsible for slightly over 35 per cent of all deaths in Florida. Heart disease has been an outstanding problem for sometime and is rapidly becoming an even larger one. In 1948 Florida had a total of 6903 resident deaths attributed to diseases of the heart. This was a rate of 278.7 per 100,000 population. In 1958 a total of 15,280 resident deaths were caused by heart disease giving a rate of 343.5 per 100,000 population. This increase is significant, but just as important is the fact that there are untold thousands who do not die, but survive only to become cardiac cripples. This is creating serious socio-economic problems for families, communities and the state. The same situation holds true for cerebral vascular disease which is the third leading killer in Florida. Numerous stroke victims survive only to live the rest of their lives as semi- or complete invalids.

In the future then, the heart program needs not only to try to find ways of preventing heart and cerebral vascular diseases but it must also redouble its efforts in the field of rehabilitation where a tremendous need is seen.

EDUCATION

The Fourth Biennial Cardiovascular Seminar for nurses entitled, "Strike Back at Stroke," was held this year in 6 large Florida cities (Pensacola, Tampa, Miami, West Palm Beach, Orlando and Jacksonville). Some 900 nurses attended the 6 meetings. A similar program was followed in each city, with medical and para-medical personnel (physical, occupational and speech therapists, public health nurses, vocational counselors, etc.) discussing their respective responsibilities to the stroke patient. Several important points were made: (1) the overall problem requires a team approach for proper handling (2) the doctor in charge should be the coordinator of such a team and (3) that rehabilitation of the stroke patient has a definite place in the everyday practice of medicine and has been too long neglected.

The Sixth Annual Cardiovascular Seminar for Physicians — held in Jacksonville, February 19-21, 1959, was again sponsored by the State Board of Health; Florida Medical Association; Division of Postgraduate Education, College of Medicine, University of Florida and the Northeast Florida Heart Association. Many prominent speakers in the field of medicine participated in this seminar and it was again well received by the attending physicians. A tape recording of the seminar was prepared and several copies were made. These recordings are made available to all physicians in the state through the Audio-Visual Library of the State Board of Health.

Three public health nurses from Pinellas County were sent to the Kirkpatrick Memorial Institute of Physical Medicine and Rehabilitation in Winter Park, Florida for a 2 weeks training course in rehabilitation nursing.

A summer fellowship was provided for a medical student from the University of Florida. This student worked with a research project dealing with "Strokes" and also aided in a similar program concerning nursing homes. An exhibit entitled, "Strike Back at Stroke" was presented at the Florida Medical Association Meeting in Miami in May. This exhibit was obtained from the U. S. Public Health Service and served to emphasize the importance of rehabilitation of stroke cases.

COMMUNITY SERVICES

Funds were made available to 5 County Health Departments to expand their activities in the field of cardiovascular diseases. These funds were primarily used to furnish additional personnel, particularly public health nurses. Activity reports from the County Health Departments (see report of Bureau of Local Health Services elsewhere in this report) indicate a total of 17,216 field visits were made in 1959 to patients suffering from various forms of cardiovascular disease, an increase of 2310 visits over 1958. These nurses also aided greatly the follow-up program of rheumatic fever and/or heart patients.

The Northeast Florida Cardiac Work Classification Unit continued its activities. A total of 20 patients were seen (17 new admissions) during 29 clinic sessions. Referrals came from the Vocational Rehabilitation Service (11), Duval Medical Center and private physicians. The patients' ages ranged from 29 to 65 with the average being 49.5 years. Nineteen of the 20 patients were male. Twelve of them were in the 46-60 age group, which was encouraging, for they were still in their productive years and deserved a chance for further employment. In November a public health nurse was added to the staff. This nurse works also in the county heart clinic and with the Visiting Nurses Association, and thereby serves to coordinate all 3 programs with respect to cardiovascular disease. The Northeast Florida Cardiac Work Classification Unit will be continued for another year. Present records indicate that approximately 50 per cent of the patients seen are now successfully employed.

The number of medically indigent rheumatic fever patients receiving free penicillin in 1959 increased from 13 to 26.

Support of cardiac clinics (Pensacola, Tampa, Marianna and Jacksonville) with nurses, stenographers, etc., continued, home visitation services are rendered in several of the other clinics. Work was begun toward the establishment of a new clinic in Leon County. Florida has 17 heart clinics, 9 of which are now approved by the Clinics Committee of the Florida Heart Association. Most of these clinics are supported in some way by the Florida Heart Association. Funds were made available for the expansion of the Tampa clinic.

RESEARCH

In January 1959, a stroke study was initiated. The purpose of the study was to investigate the management of 100 consecutive cases of stroke seen in the emergency room of Duval Medical Center in Jacksonville. Such information as age, race and sex of patients, cause of stroke, disposition (hospitalized, sent home or to nursing home), associated disease conditions, immediate therapy and long term therapy, was recorded on appropriate forms. A control group will be taken from the same hospital starting in January 1960. More concrete conclusions can possibly be drawn following an analysis of the records of these patients.

The project concerning serum cholesterol values in relatives of diabetics was continued through 1959. Over 1000 blood samples have been collected and determined. Preliminary examinations of these figures seem to indicate that the relatives of diabetics as a whole do not exhibit an abnormal elevation of cholesterol as do practically all untreated diabetics. This study will continue into 1960.

The rheumatic fever registry underwent a complete re-evaluation in 1959. An extensive follow-up program was initiated so that all cases would be brought up-to-date. Through this process the number of cases in the active registry dropped from 650 cases in January 1959, to 418 in December 1959. Medically indigent cases continued to receive free penicillin

if so ordered by the physician in charge. Thirteen cases were recipients of this service in January 1959, but in December the number had grown to 26. Efforts to re-emphasize the importance of close supervision of rheumatic fever and/or heart cases was greatly facilitated by the health officers and nurses in the local areas.

The study of heart disease among children at the Florida State School for the Deaf and Blind, being conducted jointly by the State Board of Health and the United States School of Aviation Medicine, Pensacola Naval Air Station, is being continued.

The hypertensive study at Duval Medical Center was brought to a close. An attempt was made to evaluate the effectiveness of close home supervision of hypertensive patients by the public health nurse, as opposed to only clinic supervision. Records need to be evaluated before definite conclusions can be drawn.

ACCIDENT PREVENTION PROGRAM

This program continued to expand during 1959. Two more Poison Control Centers were established during the year, one in the J. Hillis Miller Health Center of the University of Florida and the other in Mt. Sinai Hospital at Miami Beach. A third Center is being set up in the Veterans Memorial Hospital in Bradenton. These additions were accompanied by a marked improvement in the reporting of cases treated in almost all the Centers, with a corresponding increase in follow-ups by the County Health Departments involved.

Florida acted as host state to a seven-state seminar on accident prevention programs sponsored by the U. S. Public Health Service. Health department personnel from Alabama, Georgia, Florida, Mississippi, South Carolina, Tennessee and North Carolina were in attendance.

During the year the State Board of Health accepted membership in the new Farm Safety Committee, made up of official and voluntary agencies interested in some phase of farm safety. Under the auspices of this Committee the State Board of Health and the Alachua County Medical Society laid the groundwork for a countywide survey of farm accidents to be conducted in 1960.

Two other fact-finding projects were organized in cooperation with outside agencies. A study of the cause of accidental injuries to children in vehicles got underway in mid-year in conjunction with the Accident Prevention Committee of the Florida Pediatrics Society and the Florida Chapter, American Academy of Pediatrics. It will be finished in 1960. A study of the causes and types of accidents to residents in nursing homes was sponsored jointly with the Florida Chapter, American Nursing Home Association. The data collection phase ended December 31, 1959; however, it will be sometime in 1960 before all late returns are received so that findings and conclusions may be made and a course of action set up to reduce accidents in this special segment of the population.

The activities of the Accident Prevention Program were widened by the appointment by the State Health Officer of a joint committee within to coordinate the interests and responsibilities of the various bureaus and divisions. The committee consists of representatives of the Bureaus of Local Health Services, Maternal and Child Health, Mental Health, Special Health Services, and Divisions of Public Health Nursing, Sanitation, Epidemiology, Health Information.

This committee is to function for a period of 6 months, at which time an evaluation will be made. It is anticipated that this will be a continuing committee.

A study was made on the rate of injury among health department employees, toward the end of the calendar year. Action to reduce the present rate of injury is projected as an activity for early 1960.

Numerous preliminary conferences were held with representatives of various groups which may prove useful in forwarding accident prevention activities in the near future. Examples are, Jacksonville—Duval County Safety Council in regard to possible activities with the Fire Division and the soon-to-be-formed Women's Division, Association of Insurance Underwriters with a view to possible future educational programs in home fire safety, and with the Agriculture Extension Division regarding educational programs for farm families.

BUREAU OF SANITARY ENGINEERING

DAVID B. LEE, M.S., Eng.
Director

SIDNEY A. BERKOWITZ, M.S., Eng.
Assistant Director

Previous annual reports of this bureau have reflected the continuing rapid growth in the state. In 1959 there has been no slackening of the pace as will be readily noted in this report.

As in previous years, the problem of maintaining and obtaining a staff of properly qualified personnel continues to plague this bureau. Even though during the year the personnel losses have generally been offset through employment of new staff members, the existing budgetary organization has been inadequate to provide necessary surveillance and conduct of all activities with which this bureau is charged. The increased work load placed upon the bureau, principally through the influx of population to the state and industrial development, has far outstripped the capabilities of the present staff and consequent delays in the processing of various programs have thus ensued.

At the beginning of the year, recognizing that in the proper implementation of public health programs the professional opinions of all concerned with such programs are extremely important, the first annual engineering conference was held in Jacksonville. Attending this conference were all county and regional sanitary engineers as well as bureau staff. All of the bureau's programs were reviewed, and many progressive developments can be attributed to the conference, including improved coordination and cooperation.

As in past years, the regional sanitary engineers continued to devote a major portion of their time in the area of promoting and obtaining improved water and waste water facilities. In general, the work of the programs in the regional offices was, as in the past, handicapped through the lack of necessary supporting personnel. In two regions the lack of clerical assistance, causing professional personnel to devote considerable time to basic office mechanics, seriously impeded the efforts of these engineers. In spite of the apparent difficulties, however, these offices continue to provide a most necessary and valuable purpose through close contacts with area problems. The west Florida region, with headquarters in Tallahassee, remained without an engineer, although in the latter part of the year, a man was employed who is expected to move into the region early in 1960. The absence of an engineer in West Florida has caused the normal regional work load to be superimposed upon the central office operations.

In an effort to reduce this load and at the same time take full advantage of the professional ability of county and regional engineers, authority was given to the latter individuals to review and approve plans for small waste disposal systems. Coordination between the bureau and

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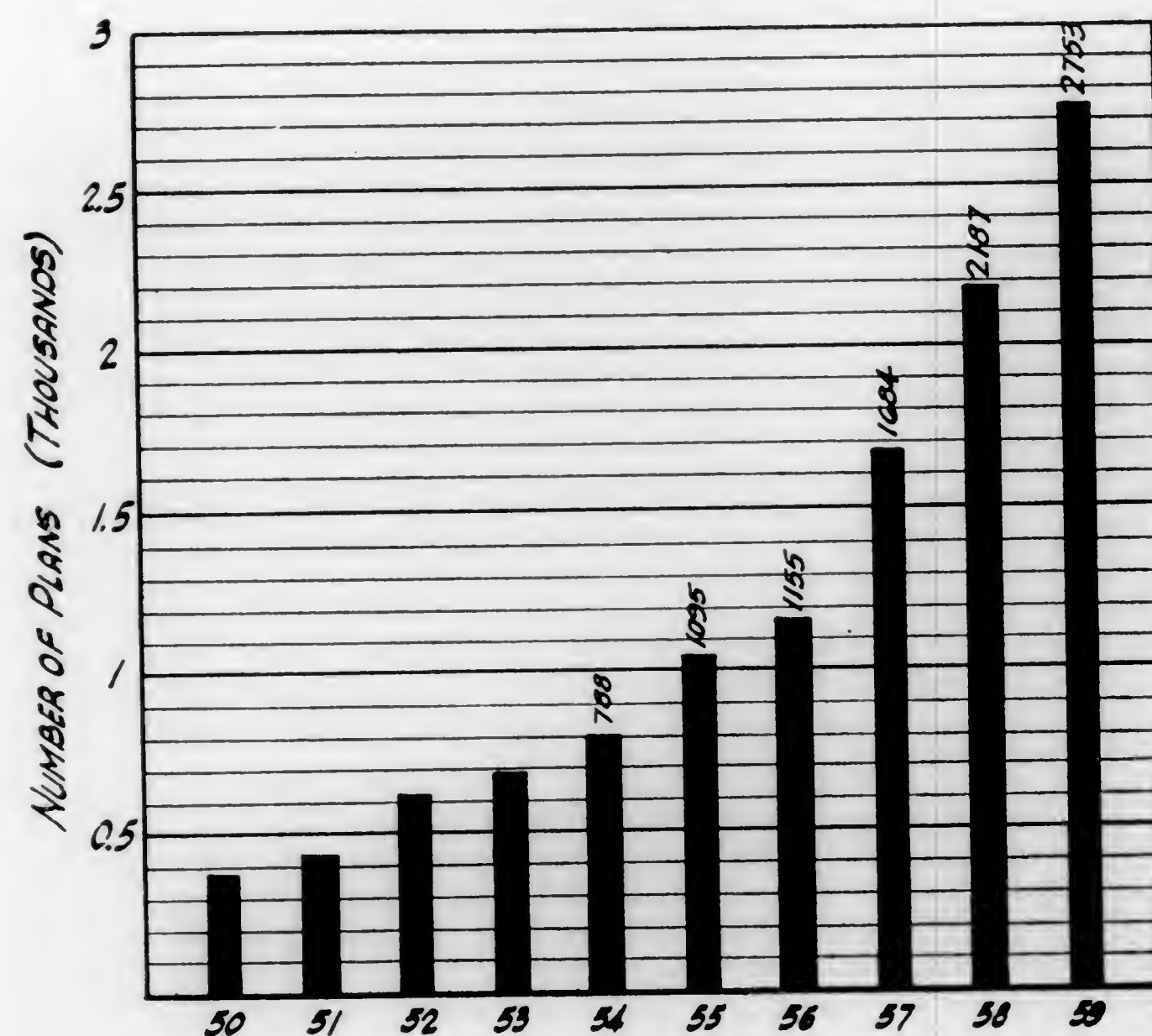
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*GRAPH SHOWING NUMBER OF PLANS
PROCESSED ANNUALLY
A TEN YEAR COMPARISON
1950-1959*



*TOTAL OF PROCESSED PLANS SHOWN BY THIS GRAPH, COMPRISES OVER 90 PERCENT OF ALL PLANS PROCESSED BY THIS BUREAU SINCE JULY 13, 1926.

FIGURE 4

local departments was implemented through establishment of procedure whereby opinions of County Health Departments would be obtained prior to approval of plans for water or waste water facilities.

The efforts of the county sanitary engineers were implemented by the assistance of bureau personnel when necessary. With the assignment of a sanitary engineer in Orange County, it was expected that a considerable work load would be removed from the central regional office. This reduction lasted only until the last month in the year when the assigned county engineer terminated his employment for personal reasons. At the same time, preparations were made for the addition of Sarasota County to the list of those having their own engineer to be effective January 1960.

Technical assistance from the bureau in addition to the legal assistance of the State Board of Health was given in Pinellas County in connection with a suit brought against the County Health Department with respect to approval of septic tanks in an unsuitable area. At the close of the year, the final decision of the court had not been made known.

Of major importance was the physical establishment of a stream sanitation laboratory at Winter Haven staffed by an engineer, a chemist and a biologist. This, the first permanent field team established by the bureau, has permitted the gathering of basic data with respect to surface water in the central Florida area. The stationing of a chemist in the Orlando laboratory with principal duty in the bedding inspection program permitted very limited coverage of the stream sanitation program in the vicinity of Orange County. In addition, steps are being taken toward establishment of a stream sanitation laboratory (with minimum personnel) in the west Florida area to be located at Pensacola. It is planned to activate this facility early in the coming year and in anticipation thereof, personnel have already been employed.

During the year, the air pollution program of the State Board of Health was transferred to this bureau. With this assignment, the bureau is now responsible for all technical and program phases of the air-water contact of the environment.

The radiological health program continued on a minimum scale with 442 samples analyzed from all areas of the state. Even the minimum program in this area has permitted the extension of our knowledge in advance of nuclear developments within the state.

The substantial dollar volume of sanitary works for which plans were approved by the bureau is clearly set out in the reports of the two divisions which follow. The progress made in the fields of both water and waste water facilities is a direct reflection of the continuing efforts by the bureau staff both in the central office and in the regional offices, as well as the efforts of the local county engineers. While this report in its

entirety indicates a serious condition with respect to the mechanical processing of plans and related documents, there has nevertheless been no slackening in the overall promotional efforts.

DIVISION OF WASTE WATER

RALPH H. BAKER, JR., M.S.S.E.
Director

The year under review was the first full year of operation of this division. The current director served as Acting Director during the early months of the year and was designated as director in November 1959. The present staff of the division is 5 engineers and 3 stenographers. Work in the field is conducted on a cooperative basis with regional and county sanitary engineers.

The work of the division falls into 2 major categories: municipal waste and industrial waste. The control of drainage wells is a separate problem related to both of these.

MUNICIPAL WASTES

The rapid expansion of sanitary sewerage facilities in Florida continues, as shown in Figure 4. During the year a total of 121 new domestic sewage treatment plants was approved of which 74 provide service to new residential subdivisions. This compares with 66 approved in 1958, the largest number in any preceding year. (See Figure 6). In addition to this, many existing domestic sewage treatment plants were expanded during the year to provide service to rapidly developing areas.

One highlight of the year's activity was the review and approval of sewage treatment facilities and sewer systems to serve portions of the City of Jacksonville. Construction was initiated during the year and includes a sewerage system to serve an area with a population of approximately 80,000 persons. The first unit of the sewage treatment plant will have a capacity to treat the domestic sewage contributed by 175,000 persons. The plant under construction is designed to permit an ultimate expansion to a capacity adequate to serve 700,000 individuals. Jacksonville is the last of the major metropolitan centers in the state to provide these facilities. The treatment plant will provide primary treatment with effluent chlorination. This project will greatly reduce the volume of raw sewage contributed to the St. Johns River.

The division received and reviewed a total of 976 projects covering facilities to serve municipalities, subdivisions or private interests requiring sewage treatment. Of these 890 were eventually approved after review and after some recommended revisions. (Refer to Table 38). In addition to this 252 projects were reviewed and approved by the regional and county sanitary engineers, (Table 39), and these documents were submitted as information copies to the division. The cooperative plan followed was that outlined by memorandum dated April 27, 1959 entitled "Procedures for Processing Sewage Treatment Facilities involving

Septic Tanks." In accordance with this agreement smaller plants of standard construction were reviewed and approved by the regional and county sanitary engineers.

Cooperation with County Health Departments was extended in another manner. To assure that they would have an opportunity to comment on proposed facilities, they were furnished plans and related documents covering proposed work in their jurisdiction with a request for review and comments in regard to environmental aspects of the proposed facilities such as location and local restrictions in area developments. This cooperative plan was recommended by the Health Officers Conference and details concerning the procedure were outlined in memoranda dated September 22, 1959.

In addition to the review of finished plans there was a heavy volume of correspondence and many consultations concerning details of design of proposed projects. Preliminary engineering reports in bound volumes were received for 56 proposed projects. Each of these submissions required detailed study by staff and this early consultation was considered particularly productive since it aided in insuring that the facilities to be proposed would satisfy all pertinent criteria of this agency.

In part the marked increase in the work load of the division was related to the creation of the Division of Sanitation in the Bureau of Local Health Services. Projects involving relatively minor sewerage systems previously were handled by the Environmental Sanitation Section of the Bureau of Sanitary Engineering. The termination of this section resulted in the addition of 162 projects to the work of this division.

The financial aid provided through Public Law 660 was a continuing impetus to the construction of sewage treatment facilities for municipalities. The following data indicate the assistance provided from this source:

FISCAL YEAR 1959-1960

Federal allotment for fiscal year 1959-1960	\$ 899,700.00
Funds released by cities from unused contingency funds	\$ 45,101.15
Unencumbered funds from allotments for previous fiscal years	\$ 52,708.15
Total amount available to applicants qualifying for a grant for the current fiscal year	\$ 997,509.30
Number of applications received	28
(Of these 8 were new applicants and 20 were letters from unsuccessful applicants of previous fiscal years requesting reconsideration of original applications or new projects.)	
Estimated costs of overall projects	\$26,624,597.86
Federal grants requested	\$ 4,742,298.89
Per cent of overall costs for which grants were requested	17.8

Offers of assistance provided from this source were made by the Surgeon General of the U. S. Public Health Service to Titusville, Pinellas Park, Monticello, Bonifay, Orange Park and Ormond Beach. All accepted with the exception of Bonifay and acceptance here is expected in January 1960. Additional communities which would qualify for a grant when sufficient funds are available include Lynn Haven, Jacksonville, South Daytona, Macclenny and Cocoa. Favorable consideration is based on readiness to proceed with construction and other specified priority factors.

At the year's end sewage collection systems were serving 50.5 per cent of the population and treatment plants built or approved have a capacity adequate to serve 67 per cent. During the year the proportion of population served by sanitary sewers increased by 21 per cent and there was an increase of 15 percent in the designed capacity of sewage treatment works. This is to be compared with an estimated increase of 2.8 per cent in the state population. Thus there is substantial and gratifying progress toward the provision of modern sewage treatment facilities to the state's population. If all the 121 new sewage treatment plants approved this year are built in 1960, we will have approximately 500 sewage treatment plants in Florida. In 1946 Florida had only 25 such plants.

The staff of the division has not been able to give needed attention to plant operation and supervision. Despite the requirement that sewage treatment plants submit operating reports, only one-half of the existing plants did so in the year under review. This indicates a need for more frequent and intimate contact between the sanitary engineers in the county, in the region or at state level with the operators of these plants. Figure 7, reflects the progress of sanitary sewerage in Florida.

INDUSTRIAL WASTES

During the year there were 134 approvals of plans for industrial waste treatment facilities in 34 counties with an estimated cost of construction of \$674,265. (Table 40). This compares with 55 approved in 1958. However the average cost of the 1959 projects was considerably less.

Each industrial waste installation required individual consideration to determine its adequacy to handle the particular waste from an individual plant. The following are illustrative of the distinctive types of problems which required consideration. There was a metal processing plant, 3 meat processing establishments, 3 plating plants and citrus processing plants. One of the plating plants previously discharged toxic pollutants which threatened nearby water supply wells. The review of plans for this disposal plant necessitated an individual study which required 3 separate field trips averaging more than one day each before the problem could be properly resolved. A substantial amount of time is required for contacts with industries and others for the planning of waste disposal facilities.

Current operating reports are received regularly from the following 8 industrial concerns: The Martin Company, St. Regis Paper Company (Pensacola), Armstrong Cork Company, American Cyanamid Company (Santa Rosa Plant), Chemstrand, Sperry Rand Corporation, St. Regis Paper Company (Jacksonville), Hudson Pulp and Paper Company. These included one located in a county whose waters are exempted from State Board of Health control by law. Waste discharges from large industrial concerns in another county similarly exempted continue to be controlled and unrecorded. During the year data pertaining to 4 companies were referred to legal counsel for action deemed necessary when it proved impossible through other means to obtain satisfactory treatment of the waste water discharged by these concerns.

An inventory of industrial waste treatment facilities in the state has been initiated but not completed.

The work involved with industrial waste required the time of 2 engineers.

STREAM POLLUTION

This activity required a total of 78 engineer work days during the year. Major attention was given to the performance of stream pollution surveys (Table 41). Other time-consuming activities involved an examination of the efficiency of treatment plants. This work has not received the attention indicated by its importance.

Additional field studies involved an examination of pollution from industrial wastes, such as food processing, laundries, pulp and paper mills, phosphate plants, chemical plants, meat processing, oil processing and radiological installations. This required 45 days engineer time and was concerned with problems scattered throughout the entire state.

DRAINAGE WELLS

In 1959, 263 drainage well permits were issued. Of these 122 were to receive waste water from closed air conditioning systems; 43 for lake level and surface water control; 84 to receive drainage from swimming pools and 14 for other purposes. (Table No. 42). In contrast with other activities there was a substantial decrease in the number of these permits in 1959 as compared with earlier years.

One city only (Live Oak) is continuing to dispose of raw sewage by means of a drainage well. In connection with this the 18th Annual Report of the State Board of Health (1906) discussed this same problem in the same city.

"Key West, Fla., May 13, 1904

"To His Excellency, W. S. Jennings,
Governor of Florida,
Tallahassee, Florida.

(Through Hon. E. M. Hendry, president State Board of Health).

"Dear Sir:

"I beg respectfully to invite your attention to the great apparent necessity for soliciting the cooperation of the United States Geological Bureau in determining the course of the underground water streams of the state. The State Board of Health is confronted with a most serious problem in connection with the potable water supply of many towns, associated as it is with the disposal of domestic waste. Where towns are located on river banks, sounds, or on the ocean, the disposal of sewage is not a difficult question to adjust, but many of the inland towns whose population has grown quite rapidly during the past ten years, seek how to adopt a more convenient and satisfactory method of disposing of sewage and have placed in operation a sewer system at the same time that a water works plant was established.

"In not a very few of these inland towns the sewage is run into a 'sink hole', of which there are a number in the central and western part of the state, and the sewage passes to where no one knows.

"In one instance, at Live Oak, there is this disposal of sewage, and I have lately caused the public water supply of that place to be examined bacteriologically, and the Bacteriologist of the Board reports that he found the sample of water sent him to be contaminated with the colon bacillus, the bacillus which infects the intestinal tract of the human.

"It is therefore conclusive evidence to my mind that there is some connection between the stream of water at the bottom of the 'sink hole' at Live Oak and the well of the water plant at that place. This present contamination produces intestinal disorders, and many of the physicians lately in attendance on the State Medical Association at Live Oak were affected by diarrhea and other intestinal discomforts."

This problem acknowledged for more than a half century will soon be resolved by the construction of a sewage treatment plant in Live Oak.

The opinion of the State Geologist is routinely obtained before issuing drainage well permits. His advice has assured more effective prevention of the pollution of underground waters through this channel.

Throughout the state the trend is to eliminate the use of drainage wells. The Lake County Health Department requested the Board to deny the issuance of permits for drainage wells within that county. Orange County has undertaken an overall county drainage study designed to reduce the number of existing drainage wells in the county and thus prevent further degradation of the underground aquifer. The problem continues to be one of substantial importance in Dade County

since 74.5 per cent of all permits and 87.7 per cent of all air conditioning drainage well permits for the state were in Dade County. Table No. 43 reflects by counties the proposed uses of the drainage wells for which permits were granted.

EDUCATION

Members of the staff cooperated with the Division of Water Supply and others in the provision of instruction given at 5 district short courses and 1 annual short course for water and sewage plant operators. (Table 44, see Report of Division of Water Supply).

An industrial waste workshop was conducted in Jacksonville August 27-28, 1959. Sixty-one persons attended. This workshop was designed to further the exchange of information between the State Board of Health and industry.

A composite film was prepared by the various industries and was shown at the annual Florida Sewage and Industrial Waste Association meeting in Tampa. This film depicted in a clear manner the different types of waste treatment utilized by Florida industry.

DIVISION OF WATER SUPPLY

JOHN B. MILLER, B.S., M.P.H.
Director

GENERAL

This was the first full year under division status and it is felt that the work of the Division of Water Supply has been more effectively and efficiently accomplished. Loss of experienced personnel through transfer and resignation, however, has been a handicap. It became more obvious that certain items in the personnel organization table need upgrading to provide stability; and unsatisfactory working conditions prevalent in present quarters is significant.

The following tables and review of the statistics show the principal activity by far had to do with construction of facilities. The total of 948 plans for proposed water systems and public swimming pools processed includes many which were approved as submitted; those which required minor changes; and those wherein major alterations were necessary. Also included are 20 per cent of the swimming pool plans approved in several County Health Departments, which were checked. This total volume of plans is 26 per cent greater than in 1958.

Insofar as sanitary control of water works operation is concerned, an inventory of these facilities was virtually completed by the year's end; and the approximately 69 per cent increase in number of public water supplies since the previous inventory (spring 1956) is indicative of the

scope of need in this respect. The 780 plants (serving 100 or more population each) are in many instances smaller than average and with relatively inexpert operation; and the lack of a positive program by the department to routinely supervise public water works operation from a sanitary standpoint continued to be an unsatisfactory situation during 1959.

A problem in development of shallow well water resources in the southwestern part of the state where deep-seated "artesian" wells produce water too highly mineralized to meet drinking water standards, became more acute. The shallow aquifers in some instances become unsuitable as domestic supplies through migration of water from existing deep wells nearby, which themselves were constructed with shallow casings and when shut off the natural pressure forces water out laterally. Further investigation to determine proper corrective measures is indicated.

Late in the year, preliminary conferences were held with personnel of Florida Railroad and Public Utilities Commission to determine best procedures for cooperation and mutual assistance with that agency in its coming activity for regulation of certain water utilities (as well as sewer utilities) under a 1959 legislative act for the purpose.

A continued problem in sanitary and safety control of public swimming pools seemed nearer solution through arrangements to construct a specially piped and equipped pool for investigations. It is expected that hydraulic as well as bacteriological studies will be made early in 1960 with the view of determining relative effectiveness of both the overflow gutter and the surface skimmer, as well as to study certain aspects of pool water recirculation.

CONSTRUCTION OF FACILITIES

Statistical information on new and proposed construction of public water works or expansion of existing plants or systems is seen in Table 46. These data represent engineering plans and specifications approved during the year, grouped in the several counties. As there were over 20 per cent greater number of such projects approved than in the previous year, the upward trend of the decade 1949-59 was continued as shown in Figure 8.

Of the total number of public water supply projects for which plans were approved, a large proportion (47.7 per cent) were for serving realty subdivisions in the state, thus continuing the development pattern for the past decade also shown in Figure 8. These proposed water systems or extensions for subdivisions not served by district, city or county supplies had an estimated cost of \$13,058,653, representing 47.8 per cent of the total dollar volume for the year. This leaves \$14,174,113 estimated construction cost of the 401 principally larger projects which were in large measure designed for municipal facilities, but also includes those for such as institutions and trailer developments. Attention is directed further to Figure 8 wherein is also seen the total number of public

water facility plans approved each year in the past several years (1949-1959) and estimated construction costs for graphical comparison with the year just closed.

Of course, much of the proposed water utility works represented by the engineering plans approved were for plant expansions, there having been an estimated cost of \$7,379,907 for this activity. When completed in their entirety and placed in service, some 139.594 MGD (million gallons per day) plant capability to meet demands for water service will have been added to the public water utilities of the state. This total of estimated plant capability, submitted in consulting engineers' designs, has been converted in terms of gallons per capita per day and added to the estimates of rated capacity in previous years; and graphical presentation of the data for 1959 in comparison with former years' accumulated totals is seen in Figure 10. As a definite indication of the continued trend to urbanization of Florida in its development and growth, reference is made to Figure 9 where graphical comparison of the estimated total population with the estimated population served by central or public water systems is shown for 1959 and the immediately preceding years.

PUBLIC WATER SUPPLY WELLS

Sources of supply developed for public water systems continued quite predominately in the construction of wells, and in Table 47 may be seen a listing of permits. Many were issued in Orange, Hillsborough, Sarasota, Palm Beach and other counties where so many realty subdivisions are being developed. In the state as a whole, 19 per cent more well permits were issued during the year than were in 1958.

WATER WORKS OPERATION

The sanitary supervision of facilities serving water to the public continued during the year to be badly neglected as a positive activity in the program of the division, as by far the majority of present personnel must be engaged in handling projects for new construction, and needed additional personnel have not been made available. A limited number of visits, 97, were made to water plants, including 19 visits to new plants placed in service during the year. Some consultation service on operation was given to sanitary engineers in 3 County Health Departments having public water supply programs, but no coordinated program by the division was carried out. Efforts were made to resume bacteriological summary of water supplies in this important measure of quality of water consumed by the public, but clerical work involved was incomplete at year's end. Samples for many supplies and treatment plants were collected in connection with water works inventory, however, clerical work on tabulation of chemical and physical analytical data has not been done.

Participation in water works operator inservice training was continued as an important adjunct to improvement of plant operation. Results of voluntary certification plan as a feature of the inservice training program carried out jointly by the division and others are seen in Table

45. Some indication is seen in possible benefit from home-study preparatory work. Of the 130 applicants examined, 64.5 per cent passed and were certified as water works operators, whereas in 1958 only 48.7 per cent were successful. Of the applicants for Class "B" and "A" certification, an even higher (80) percentage were successful, confirming the benefits of correspondence or home-study preparation.

FLUORIDATION OF PUBLIC WATER SUPPLIES

A few cities inquired about procedure for adding fluorides to central water systems. One city, Fort Pierce, through local referendum late in the year decided to instigate the practice, and it is expected plans will be approved and fluoridation started there the first part of 1960. Continuing the practice were Belle Glade, Clewiston, Cocoa, Gainesville, Miami (also other towns and cities obtaining water therefrom), Naples, Ocala and Orlando. It is noteworthy that St. Petersburg resumed fluoridation for a short while, but discontinued it on September 1, 1959 as result of local referendum on the question.

PUBLIC SWIMMING POOLS

The construction of pools to serve the public at motels, recreation parks and centers, apartments, hotels and clubs has continued in 1959 at the high level of recent years. The number of plans and specifications approved was within 6.3 per cent of the average number of such projects for the last 5 years. The estimated cost total of these pools as submitted by consulting engineers was about 10 per cent less than that for 1958. Indicating a trend to greater number of smaller pools is the fact that average estimated cost was \$13,850 per pool, about the same (\$13,200) as for the previous year. Each of these pools has its filtration, recirculation and chemical treatment equipment posing a problem in operation in the absence of trained operators.

In Table 47 is seen the statistical information on public swimming pools including numbers of projects in the counties. Of the number for which plans were approved, 115 were approved in County Health Departments having their own engineers, one-fifth of such projects having been checked in this division. Also seen in Table 47 are the numbers of so-called permanent permits for pool operation in each county issued during the year, together with the respective accumulated totals; the total pool permits issued in the state during the year being 10 per cent more than the last five-year average number issued.

Assistance was given with inservice training of pool operators in two counties where County Health Departments were active in improving pool operation through this approach. Also, consultation service was given to 2 other local departments and to pool operators in those counties.

NATURAL BATHING PLACES

The status of this activity is seen in Table 47 where the number of such permits in the counties are listed. Only 1 new permit was issued in 1959, a bathing place in Sarasota County.

COMMON CARRIER WATER SANITATION

Through a cooperative agreement with the U. S. Public Health Service, and on the basis of Service quarantine regulations and drinking water standards, the program for sanitary control of potable and culinary water on common carriers was continued in 1959. This has to do with the sources of supply and the facilities for placing water aboard railway trains and vessels operating in interstate traffic. Field work involved was accomplished by health department personnel in the state, at regional and local levels; with the results being reported to and the activity coordinated by central office. Such reports served as the basis of recommendations of the department to the USPHS regional office in Atlanta for approval or disapproval, as the case may be, and appropriate certification by that agency.

There were 32 water supplies serving both railroad and vessel watering points, 24 railroad watering points and 64 vessel watering points which were inspected and reports completed and forwarded to the USPHS. A minimum of 2 reports were made on each supply or watering point and, in some instances, additional reports were necessary due to this agency's recommendation that certain of these facilities be given provisional approval for a limited period of time.

COMMON CARRIER WATER SANITATION OF WATER SUPPLIES

	No.	Approved	Provisional	Prohibited	Recommend Deletion	No Current Report	Total
Rail	18	17	1*				18
Vessel	14	13	1				14
Totals	32	30	2				32

RAILROAD AND VESSEL WATERING POINTS

Rail	24	19	1		3	1	24
Vessel	64	54	5**	4			64
			1				
Totals	88	73	7	4	3	1	88

*Later approved

**Reinspected-extend. provisional 6 months

TABLE 38
ENGINEERING LABORATORIES ANALYSES — 1959
BASIC WATER QUALITY DATA

LABORATORY	D.O.	B.O.D.	pH	Solids	Fluorides	C.O.D.	Chlorides	NO ₂ -NO ₃ -NH ₃	Radiologicals	Phosphates	Biological	Miscellaneous*
Jacksonville.....	258	125	175	315	22	33	97	42	934	38	8360	1718
Trailer.....	1144	417	406	690	...	90	...	472	...	...	...	371
Winter Haven**.....	557	840	451	1193	355	...	363	766	...	70	...	2403
Orlando.....	...	15	11	56	...	...	...	31	...	...	...	64

*Miscellaneous includes Phenols, Cyanides, Surfactants and other specialized analyses.
 ** 1574 analyses made in connection with East Coast Survey.

TABLE 39
SUMMARY OF PUBLIC SEWERAGE PROJECTS
APPROVED IN 1959

COUNTY	No. of Projects	Design Population	ESTIMATED COSTS			
			Sewers	Lift Station	Plant	Total
Alachua.....	2	1,802	75,613	16,258	...	91,871
Bay.....	3	2,543	98,455	28,445	23,200	150,100
Bradford.....	1	5,000	...	...	550,000	550,000
Brevard.....	41	29,211	1,508,306	311,450	237,800	2,057,556
Broward.....	65	150,970	3,026,188	515,248	1,057,867	4,599,303
Charlotte.....	6	2,187	139,500	15,000	15,000	169,500
Clay.....	6	1,960	47,050	7,500	23,193	77,743
Collier.....	4	1,163	196,730	21,200	9,250	227,180
Columbia.....	1	497	84,274	25,000	...	109,274
Dade.....	78	62,697	4,820,727	734,413	501,400	6,056,540
DeSoto.....	2	630	109,345	20,957	...	130,302
Duval.....	185	321,159	11,763,144	2,682,292	3,880,090	18,325,526
Escambia.....	16	7,203	221,470	20,660	147,063	389,193
Franklin.....	2	144	20,000	20,000	40,000	80,000
Gadsden.....	1	438	86,750	...	...	86,750
Hardee.....	2	852	34,855	4,829	...	39,684
Highlands.....	2	833	90,000	20,000	30,000	140,000
Hillsborough.....	63	83,554	3,251,845	316,764	955,150	4,523,759
Indian River.....	10	2,166	235,598	74,797	55,923	366,318
Jefferson.....	1	2,975	73,492	48,000	170,612	292,104
Lake.....	3	150	11,500	...	...	11,500
Lee.....	7	6,688	329,132	73,960	208,942	612,034
Leon.....	2	600	22,000	25,000	79,000	126,000
Madison.....	1	550	...	20,000	...	20,000
Manatee.....	12	10,011	231,185	3,281	340,880	575,346
Marion.....	3	1,033	60,000	10,000	...	70,000
Martin.....	2	846	50,615	10,000	25,000	85,615
Monroe.....	1	500	25,000	15,000	45,000	85,000
Nassau.....	5	564	11,500	13,400	45,000	69,900
Okaloosa.....	4	7,964	547,100	104,600	79,100	730,800
Orange.....	82	53,265	2,194,307	418,322	737,300	3,349,929
Osceola.....	3	700	67,372	32,300	...	99,672
Palm Beach.....	46	59,867	3,066,514	500,243	922,708	4,489,465
Pasco.....	3	1,802	37,500	1,500	67,500	106,500
Pinellas.....	140	80,692	4,112,917	411,929	875,220	5,400,066
Polk.....	9	4,075	332,718	89,438	17,000	439,156
Putnam.....	2	1,599	423,368	8,000	...	431,368
St. Johns.....	3	350	13,000	2,000	12,000	27,000
St. Lucie.....	4	2,080	134,000	15,000	8,500	157,500
Santa Rosa.....	9	7,323	272,450	32,800	200,000	505,250
Sarasota.....	35	27,799	2,326,893	487,300	574,470	3,388,663
Seminole.....	11	11,431	440,707	101,057	342,900	884,664
Suwannee.....	2	7,500	232,000	37,500	300,000	569,500
Volusia.....	9	1,463	214,234	47,965	21,223	283,422
Washington.....	1	231	10,704	...	...	10,704
TOTALS.....	890		41,050,058	7,343,408	12,598,291	60,991,757

TABLE 40
WASTE PROJECTS PROCESSED LOCALLY*

REGIONS	
Northeast	130
Northwest	0
Central	13
Southeast	2
Southwest	14
COUNTIES	
Broward	13
Dade	8
Hillsborough	N.R.
Orange	8
Palm Beach	13
Pinellas	46
Polk	0
Volusia	5
Total	252

*As a result of procedures set forth in Memo. 8, 1959

TABLE 41
INDUSTRIAL WASTE PROJECTS APPROVED IN 1959

COUNTY	No. of Projects	Estimated Cost
Brevard	7	\$37,850
Broward	32	141,100
Dade	43	220,100
Duval	9	70,400
Escambia	5	15,765
Hillsborough	1	4,500
Indian River	1	2,500
Lee	5	16,500
Manatee	2	11,700
Orange	1	5,000
Palm Beach	14	65,350
Pinellas	5	18,400
Polk	1	12,000
Santa Rosa	5	36,800
Sarasota	1	2,800
Seminole	2	6,500
Volusia	2	7,000
TOTAL FOR STATE	134	\$674,265

SEWERAGE PROJECTS APPROVED
1955~1959

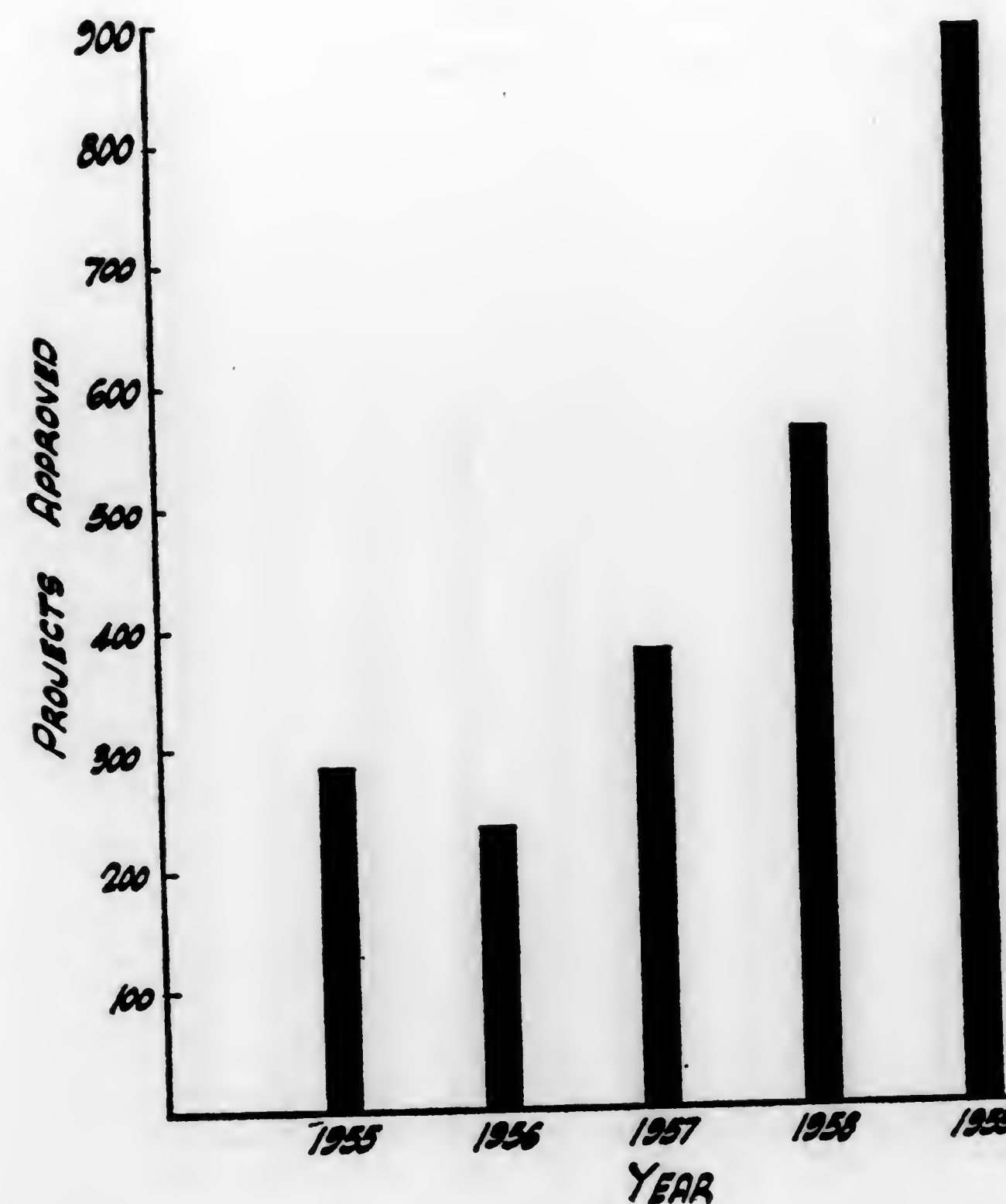


FIGURE 5

TABLE 40
WASTE PROJECTS PROCESSED LOCALLY*

REGIONS	
Northeast	130
Northwest	0
Central	13
Southeast	2
Southwest	14
COUNTIES	
Broward	13
Dade	8
Hillsborough	N.R.
Orange	8
Palm Beach	13
Pinellas	46
Polk	0
Volusia	5
Total	252

*As a result of procedures set forth in Memo. 8, 1959

TABLE 41
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COUNTY	No. of Projects	Estimated Cost
Brevard.....	7	\$37,850
Broward.....	32	141,100
Dade.....	43	220,100
Duval.....	9	70,400
Escambia.....	5	15,765
Hillsborough.....	1	4,500
Indian River.....	1	2,500
Lee.....	5	16,500
Manatee.....	2	11,700
Orange.....	1	5,000
Palm Beach.....	14	65,350
Pinellas.....	5	18,400
Polk.....	1	12,000
Santa Rosa.....	5	36,800
Sarasota.....	1	2,800
Seminole.....	2	6,500
Volusia.....	2	7,000
TOTAL FOR STATE.....	134	\$674,265

SEWERAGE PROJECTS APPROVED
1955~1959

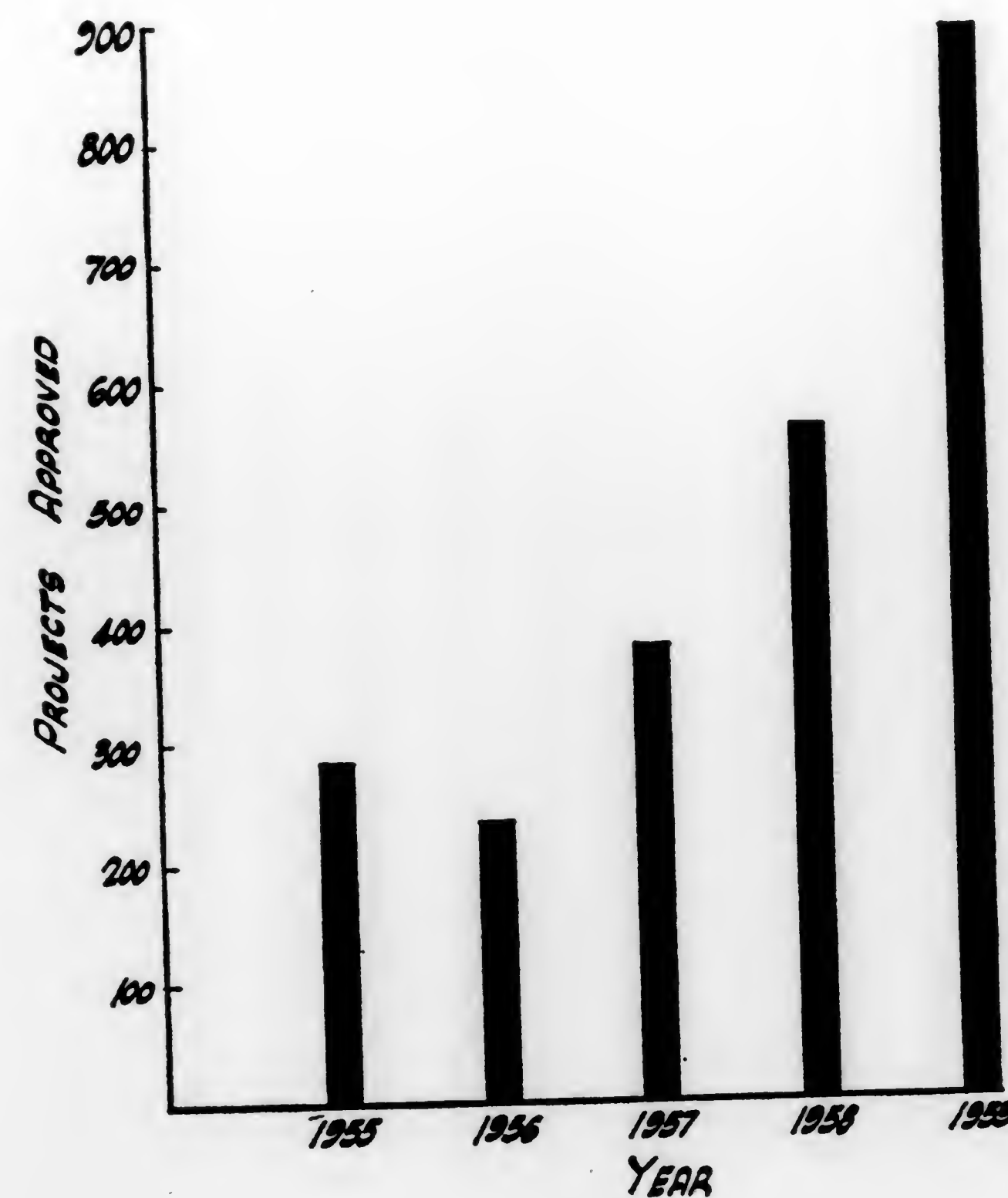
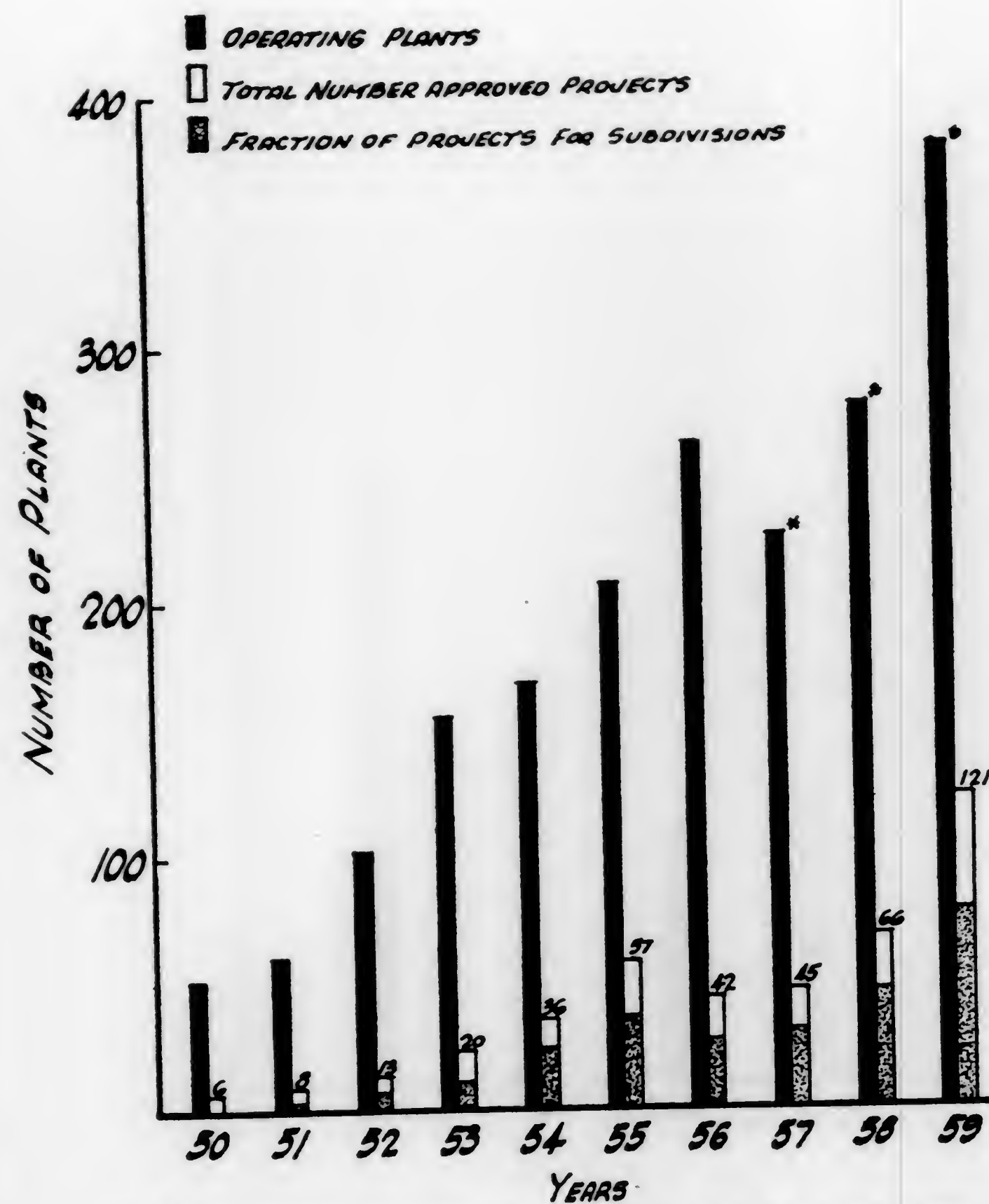


FIGURE 5

SEWAGE TREATMENT PLANTS



* THESE FIGURES EXCLUDE SEPTIC-TANK-SAND FILTER INSTALLATIONS

FIGURE 6

PROGRESS OF SANITARY SEWERAGE IN FLORIDA

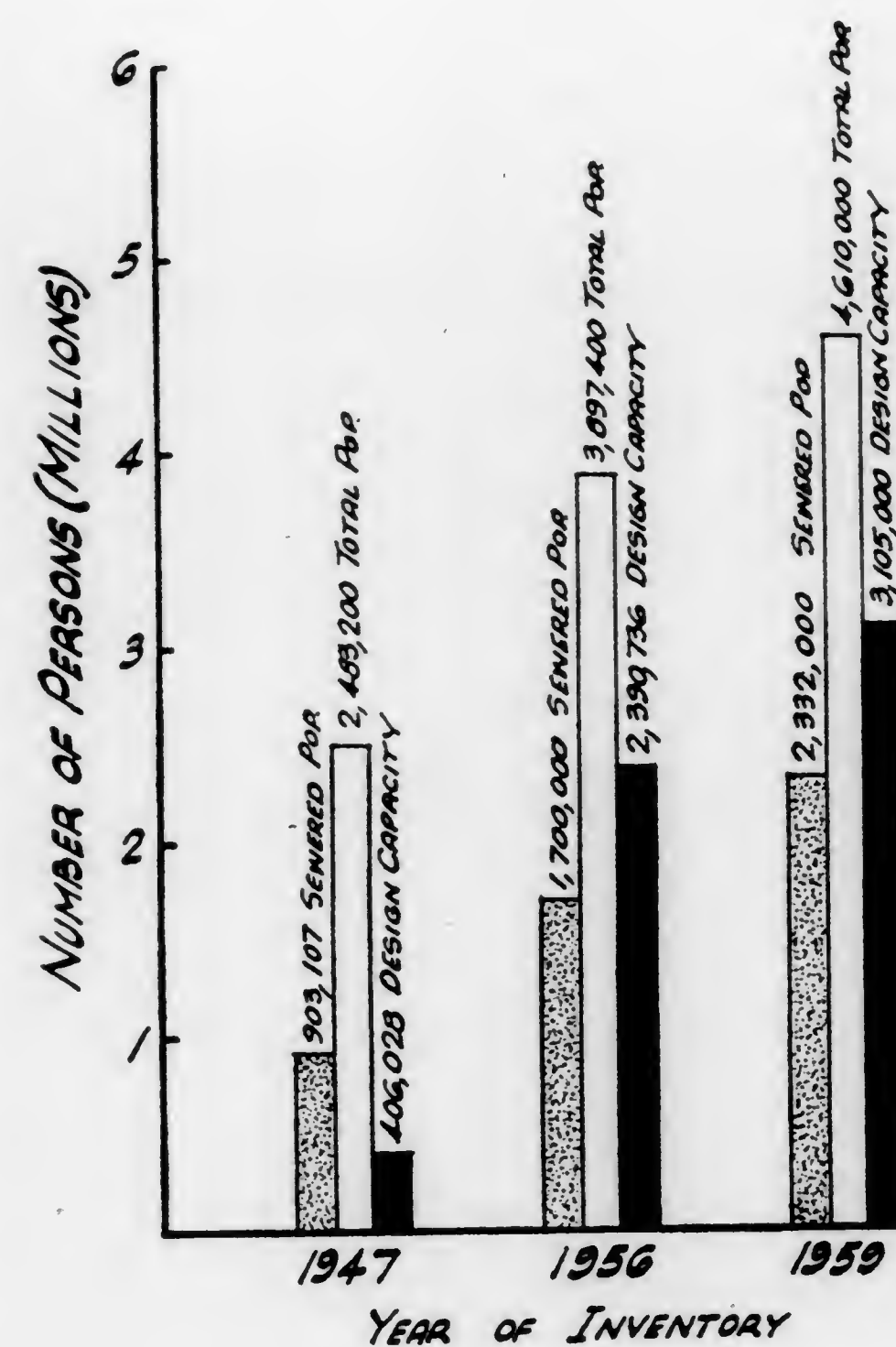


FIGURE 7

TABLE 42
SURVEY REPORTS

County	Name	Description
Brevard	Cocoa - Rockledge, February 1959.	Stream Pollution survey
	Crane Creek Sewage Treatment Plant, Melbourne, March 1959.	Treatment plant efficiency study.
	David B. Lee Sewage Treatment Plant, Eau Gallie, January - February 1959.	Treatment plant efficiency study.
	Patrick Air Force Base, February 1959, Titusville.	Plant and stream study.
Duval	Jacksonville Naval Air Station, March 1959.	Efficiency study of waste treatment.
Escambia	Bayou Chico, June 1959.	Study of waste treatment efficiency and stream condition check.
	Pen Haven Sewage treatment plant, June 1959.	Treatment plant efficiency check.
Franklin	Lanark Village, April 1959.	Treatment plant efficiency check.
Monroe	Florida Keys, August 1959.	Pollution study of waters off-shore.
Santa Rosa	American Cyanamid, May 1959.	Study of treatment of sanitary and industrial wastes.

TABLE 43
DRAINAGE WELL PERMITS ISSUED IN 1959

COUNTY	1959	1958	1957	1956	1955	1954
Alachua	3	—	—	2	—	—
Brevard	1	—	—	—	—	—
Broward	24	15	20	18	13	21
Collier	—	—	—	—	1	—
Columbia	—	—	—	—	—	—
Dade	196	287	285	303	381	274
Duval	1	—	—	—	—	—
Escambia	1	2	1	—	1	—
Hardee	2	6	5	11	6	10
Hillsborough	—	1	—	—	—	—
Jefferson	1	1	2	1	—	—
Lake	1	3	—	—	—	4
Leon	—	—	—	—	1	—
Madison	—	—	—	—	—	1
Manatee	3	4	5	1	2	2
Marion	1	—	—	—	—	—
Martin	22	16	18	9	7	11
Orange	1	1	3	4	4	3
Palm Beach	1	—	4	—	5	—
Pasco	2	—	—	—	—	8
Pinellas	—	1	—	—	—	1
Polk	—	—	1	—	—	—
Putnam	—	—	3	3	1	—
Sarasota	3	3	1	1	—	—
Seminole	—	—	—	—	—	—
Suwannee	—	—	1	—	—	—
Volusia	1	1	3	2	3	1
State	263	342	354	355	425	337

TABLE 44
SUMMARY OF DRAINAGE WELL PERMITS ISSUED IN 1959

COUNTY	Lake Level or Surface	Air Conditioning	Swimming Pools	Other
Alachua	1	2	—	—
Brevard	—	—	—	1
Broward	8	5	6	5
Dade	7	107	77	5
Duval	1	—	—	—
Hardee	1	—	—	—
Hillsborough	2	—	—	—
Lake	1	—	—	—
Leon	—	1	—	—
Marion	3	—	—	—
Martin	—	—	—	1
Orange	19	2	—	1
Palm Beach	—	—	1	—
Pasco	—	2	—	—
Sarasota	—	2	—	1
Volusia	—	1	—	—
State	43	122	84	14

TABLE 45
WATER AND SEWAGE WORKS OPERATORS SHORT SCHOOLS*

Area	Applicants		Voluntary Examination and Certification			
			No. Taking Exam.		No. Passing Exam.	
	Water	Sewage	Water	Sewage	Water	Sewage
Annual Short School						
(1) Class "A"	5	10	4	10	4	6
(2) Class "B"	11	19	6	19	4	11
Regional Short Schools						
N.E. Dist. Class "C"	16	10	14	10	9	6
N.W. Dist. Class "C"	12	11	12	11	10	4
Cent. Dist. Class "C"	13	8	11	8	8	3
S.E. Dist. Class "C"	52	39	46	39	30	24
S.W. Dist. Class "C"	17	33	16	33	8	19
Proctored Exams						
Class "C"	24	13	21	13	11	12
Total—Class "C"	184	114	120	114	76	68
Total—Class "A", "B", "C"	150	143	130	143	84	85

*This is an inservice training program under the aegis of State Board of Health carried out jointly with Extension Division of University of Florida, the Florida Water and Sewage Works Operators Association; Florida Section, American Water Works Association; and Florida Sewage and Industrial Wastes Association.

TABLE 46
SUMMARY OF WATER SUPPLY PROJECTS APPROVED — 1959

COUNTIES	No. of Projects	Capacity Increase MGD	ESTIMATED COSTS		
			Water Supply	Distribution	Total
Alachua	2	0.432	\$20,500.00	\$22,000.00	\$42,500.00
Bay	3	0.294	300.00	37,200.00	37,500.00
Bradford	3	2.518	54,950.00	47,200.00	102,150.00
Brevard	62	2.70	638,900.00	1,126,883.45	1,765,283.45
Broward	89	19.236	1,901,924.00	2,830,583.00	4,732,507.00
Charlotte	5		11,700.00	327,313.90	339,013.90
Clay	3	0.79	42,500.00	11,400.00	53,900.00
Collier	5		12,000.00	66,575.00	78,575.00
Dade	71	31.528	683,250.00	2,218,991.00	2,902,241.00
DeSoto	2		43,652.00	22,350.00	66,002.00
Duval	88	18.106	1,010,270.00	1,409,366.00	2,419,636.00
Escambia	6	2.476	91,000.00	162,300.00	253,300.00
Franklin	2	0.288	5,000.00	18,000.00	23,000.00
Hendry	1			9,500.00	9,500.00
Hernando	1	0.518	15,500.00	33,000.00	48,500.00
Hillsborough	43	7.366	270,000.00	1,751,517.00	2,021,517.00
Indian River	13	0.572	21,950.00	239,727.00	261,677.00
Lafayette	1		14,000.00		14,000.00
Lake	7	1.183	25,000.00	135,000.00	160,000.00
Lee	6	0.432	32,000.00	287,229.00	319,229.00
Leon	5	0.268	153,666.60	138,520.00	292,186.60
Manatee	14	0.540	18,500.00	294,455.00	312,955.00
Marion	2			37,000.00	37,000.00
Martin	4	1.512	45,630.00	44,345.00	89,975.00
Monroe	12		45,000.00	251,650.00	296,650.00
Okaloosa	5	0.043	2,000.00	173,600.00	175,600.00
Orange	60	10.6144	383,000.00	1,227,514.00	1,610,514.00
Osceola	3		120,000.00	75,100.00	195,100.00
Palm Beach	50	21.867	829,565.00	1,937,285.00	2,766,850.00
Pasco	6	0.288	3,500.00	72,200.00	75,700.00
Pinellas	113	0.086	400.00	2,643,104.82	2,643,504.82
Polk	5	6.158	167,750.00	386,648.00	554,398.00
Putnam	3	0.288	36,300.00	103,315.00	140,115.00
St. Johns	1			31,000.00	31,000.00
St. Lucie	4	0.115	13,000.00	196,100.00	209,100.00
Santa Rosa	5	0.491	46,000.00	131,800.00	177,800.00
Sarasota	25	7.8806	257,200.00	552,292.50	809,492.50
Seminole	25	0.288	190,500.00	558,738.00	749,238.00
Union	1		160,000.00		160,000.00
Volusia	11	0.716	13,000.00	235,958.00	248,958.00
Washington	1			6,598.00	6,598.00
TOTALS	768	139.594	\$7,379,907.60	\$19,852,858.67	\$27,232,766.27

For a detailed listing of the projects in each county, which are summarized above, please write to the Bureau of Sanitary Engineering.

TABLE 47
PERMITS ISSUED FOR SWIMMING POOLS, NATURAL BATHING PLACES, WATER WELLS; PLANS APPROVED FOR PROPOSED PUBLIC SWIMMING POOLS, BY COUNTIES 1959

COUNTY	PERMITS ISSUED				Plans approved for Proposed Public Swimming Pools	
	Swim- ming Pools**	Natural Bathing Places**	Water Supply Wells	Swim- ming Pools	Number	Estimated Cost
STATE	1,734	53	288	252	269	\$3,729,337.00
Alachua	8	2	10		2	32,000.00
Baker						
Bay	9	1	2	3	7	86,000.00
Bradford	4		2			
Brevard	10		13	1	7	73,500.00
Broward	421	2	7	57	60††	587,781.00
Calhoun	2			2	2	28,000.00
Charlotte	11			9		
Citrus	11	8	1	9		
Clay	3		2	1	8	107,320.00
Collier	5		2			
Columbia	575	2	4	45	42††	1,022,340.00
Dade						
DeSoto						
Dixie						
Duval	33		12	6	12	176,000.00
Escambia	6	1	8		2	29,000.00
Flagler					2	17,500.00
Franklin		1				
Gadsden	1		3	1		
Gilchrist			1			
Glades						
Gulf						
Hamilton		1				
Hardee						
Hendry	2					
Hernando						
Highlands	1	1	2		3	34,000.00
Hillsborough	8	7	34	1	6††	94,366.00
Holmes			1			
Indian River	10		2		3	16,000.00
Jackson	2					
Jefferson						
Lafayette	11		7	1	1	13,000.00
Lake	19	1	1	6	2	35,000.00
Lee	10	3	7		11	11,085.00
Leon	2				4	57,000.00
Levy						
Liberty		2				
Madison	2		1			
Manatee		2	8		3	45,000.00
Marion	28	3	4	3	8	33,500.00
Martin	4		1		4	108,900.00
Monroe	24			3	6	60,000.00
Nassau	6		1	2	3	33,000.00
Okaloosa	1		3		2	35,000.00
Okeechobee	1				1	15,000.00
Orange	24	1	50	5	3	35,000.00
Osceola	1		2			
Palm Beach	144	1	18	50	20	191,135.00
Pasco	1		6		1	10,000.00
Pinellas	141	8	8	21	14	195,845.00
Polk	26	3	17		7††	64,260.00
Putnam	3		2	1	1	
St. Johns	18			2	2	37,000.00
St. Lucie	13		3			
Santa Rosa	1		3			
Sarasota	36	2	24	3	16	243,315.00
Seminole	6	4	11			
Sumter						
Suwannee	2			1		
Taylor	2					
Union						
Volusia	81		5	17	8	86,490.00
Wakulla	1	1				
Walton	2			2	1	10,000.00
Washington	2	1				

**Accumulative or Continuous
††Local County Approvals

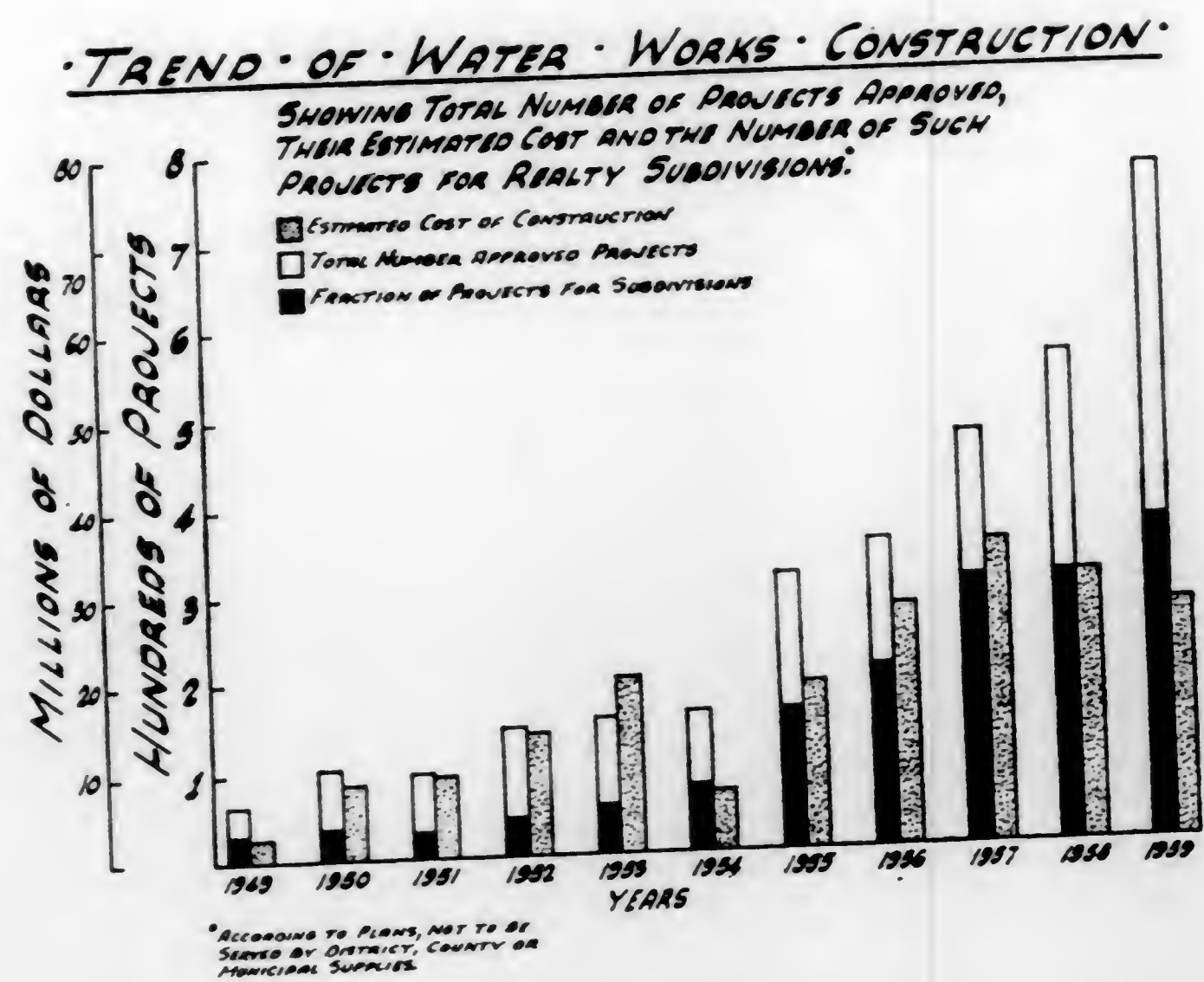
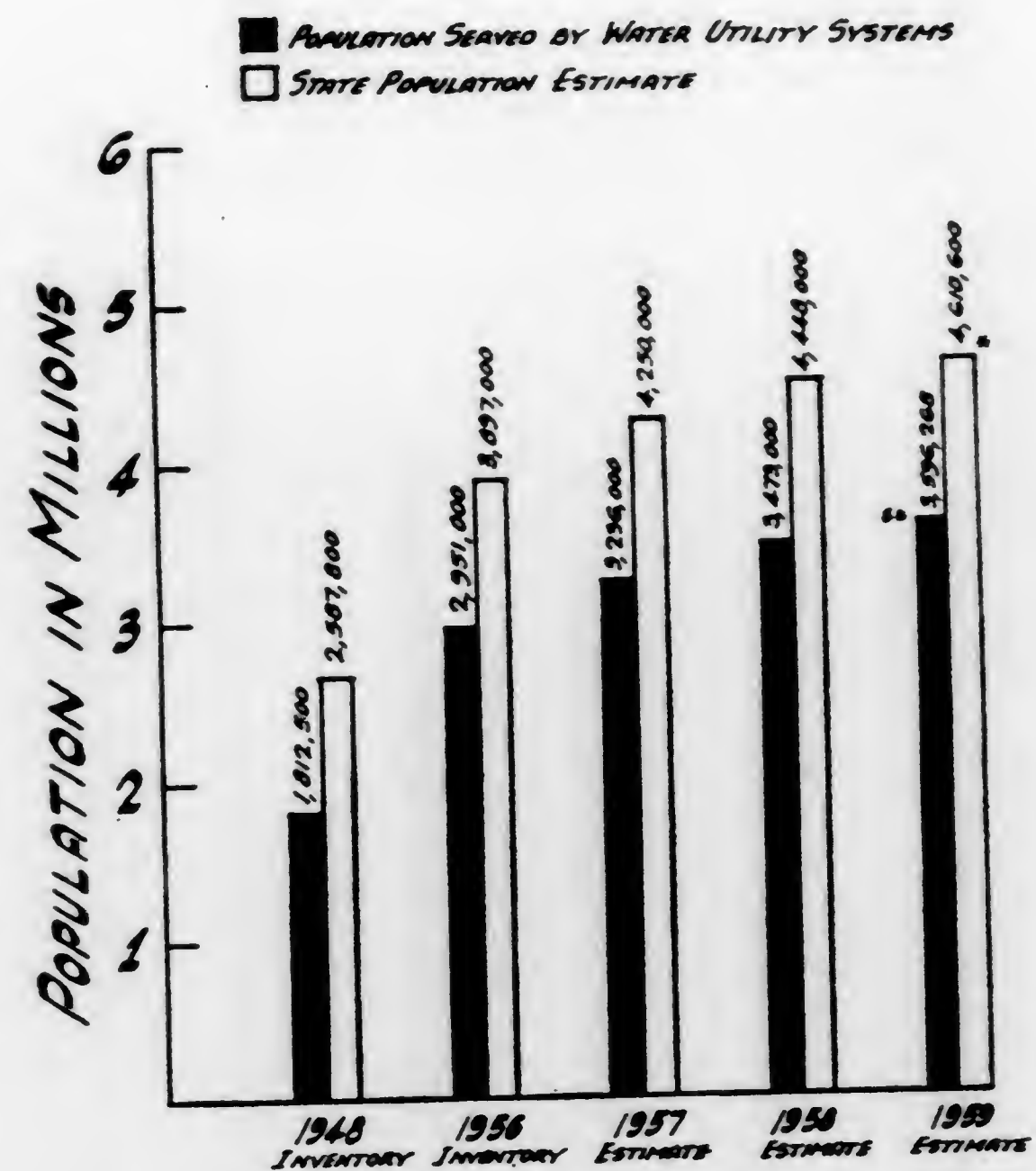


FIGURE 8

FLORIDA'S PUBLIC WATER UTILITIES*

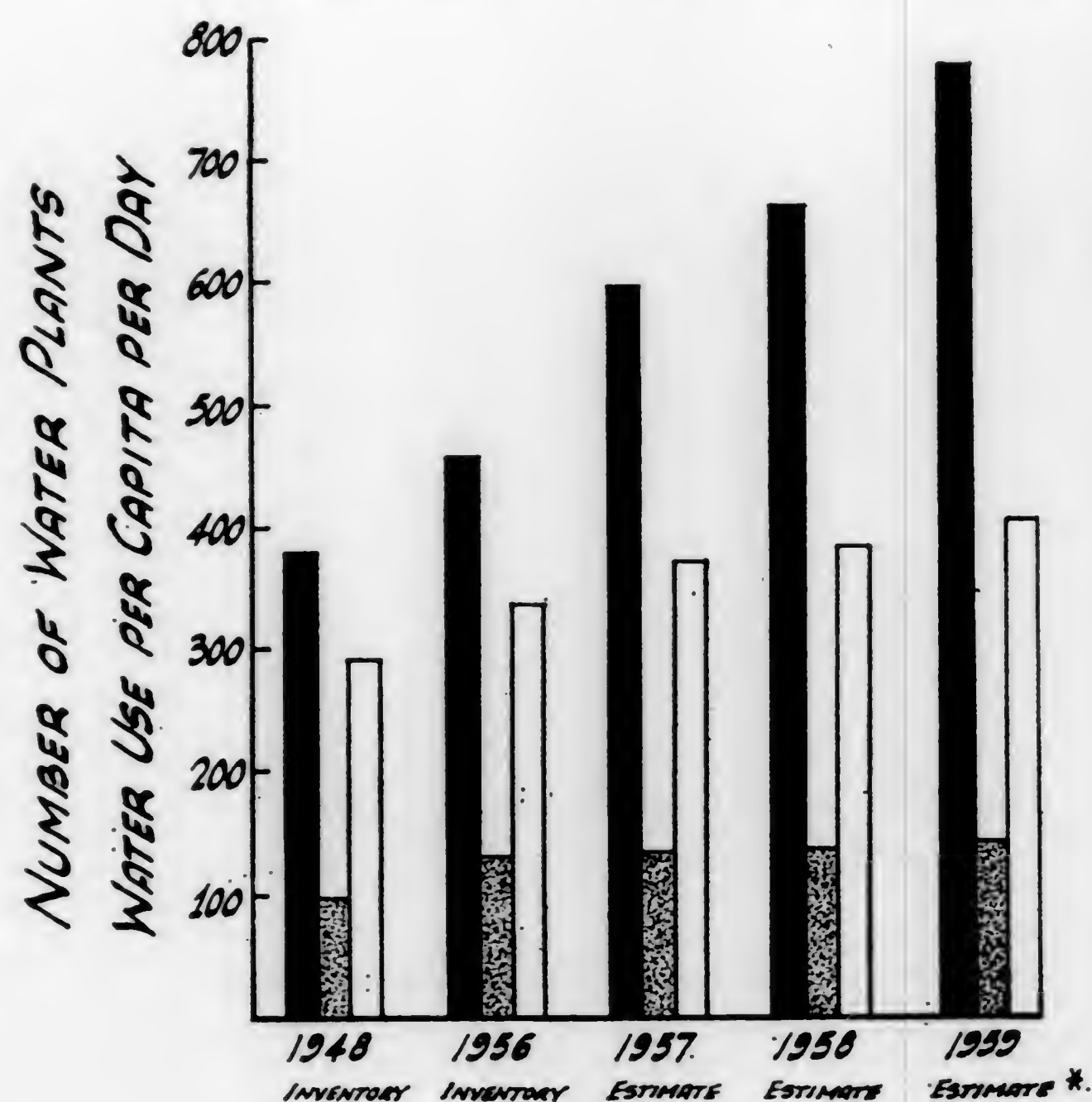


* POPULATION CENSUS (BUREAU OF VITAL STATISTICS)
 ** BASED ON WATER WORKS INVENTORY APPROXIMATELY 95 PERCENT COMPLETE AT YEARS END.

FIGURE 9

WATER WORKS *WATER USE IN FLORIDA*

■ NUMBER OF PLANTS
 ■ DAILY WATER USE PER CAPITA (GALLONS)
 □ RATED PLANT CAPACITY (GALLONS PER CAPITA PER DAY)



* BASED ON WATER WORKS INVENTORY APPROXIMATELY 95 PERCENT COMPLETE AT YEARS END.

FIGURE 10

Articles by staff members:

- Jackson, E. R. The Sanitarian and Hospital Infection Control. Sanitarian, 21: 242-243, March-April 1959.
 Beck, E. C., and Beck, W. M., Jr. A Checklist of the Chironomidae Florida. Bull. Florida State Museum, 4 (3): 85-96, 1959.
 Beck, W. M., Jr. Sewage Treatment Ponds. Overflow, 10 (5): 12-13, 1959.
 Beck, W. M., Jr. Bloodworms and Blind Mosquitoes. Overflow, 10 (5): 28-30, 1959.
 Kelso, F. S., and Lee, D. B. Activities of the Bureau of Sanitary Engineering in the Field of Radiological Surveillance. Electro Lyte, 4: 9, July 1959.

SHELLFISH AND CRUSTACEA PROGRAM

CHARLES E. COOK, C.E.
 Assistant to Director

The shellfish and crustacea control programs continued to improve during 1959 on the basis of the general alertness of these industries to process quality products by adherence to public health and safety standards. The evident progress also is due to the contributions of County Health Departments in their administrative and surveillance work. Other success elements include the improvement of relationships with producers at state and local levels and the dissemination of technical information among plant operators and their personnel.

A concentrated improvement program was developed for the Apalachicola Bay area, where Florida's shellfish industry is centered, in order to accomplish evaluation recommendations of the U. S. Public Health Service submitted the previous year. As in the past, the largest number of shellfish certifications were in Franklin County, where 33 dealers were qualified as oyster shucking and packing processors, and oyster shellstock distributors. Of the total number of certified plants operating in Florida, more than 50 per cent engaged in interstate commerce.

A new building, housing the Franklin County Health Center and Marine Laboratory, was dedicated in June. This attractive structure is functional in that it provides efficient facilities for the bacteriological examination of shellfish and crustacea products and is considered adequate for the expansion of scientific seafood studies. The City of Apalachicola commenced construction of adequate sewage treatment works which upon completion should materially reduce the pollution of adjacent bay waters and thereby permit increased shellfish production. The activation of 2 large oyster bars devoid of stock for many years and the fertility of other oyster growing beds created a greater demand for Apalachicola Bay Oysters. However, production only met 50 per cent demand during the first 4 months of the season.

There were notable changes in the production patterns elsewhere in the state. The opening of the eastern portion of Escambia Bay to oyster dredging by legislative act developed a higher rate for Santa Rosa and Escambia Counties and subsequently curtailed illegal operations. A direct

benefit was the erection of 4 new oyster shucking plants. In Bay County scallop harvesting almost ceased completely due to the migratory habits of this type of bivalve and heavy rains. A number of pollution surveys were made, particularly in Brevard, Lee, Nassau and Volusia Counties, to determine the status of condemned areas in the light of the installation of new or improved sewage treatment facilities. A system was devised to pursue bacteriological research on the existing 23 condemned shellfish areas that encircle the state on the basis of priority needs.

Advisory memoranda circulated among County Health Departments included suggested procedures for handling shellfish from foreign sources because of the concern of the federal health agency on the subject. A revision study of the State Sanitary Code, Chapter XIV, was continued working toward conformity with national standards and practices. A course of public health instruction was conducted for plant operators and workers at Eastpoint, prior to the opening of the oyster season. Other educational endeavors included lectures and demonstrations for science classes in the Apalachicola area.

The same number of crabmeat processing establishments were certified as in 1958. Although some former active operations did not reopen, new enterprises took their place. A modern crabmeat picking and packing plant was constructed at Perry under the auspices of the Taylor County Development Commission to provide employment opportunities for local citizens. A similar unit was erected in Gadsden County. Crabmeat production generally was above that in 1958 and continued at a rather stable pace throughout the year.

An outstanding occurrence was the condemnation of approximately 16,000 pounds of Brazilian lobster tails deemed unfit for human consumption. This action was taken by the responsible federal agency with assistance from the bureau.

The principal liaison work in these programs was related to participation in the Gulf States Shellfish Conference, Biloxi, Mississippi, and maintaining relationships with the State Board of Conservation, Pure Food and Drug Administration, USPHS and, insofar as interstate crustacea certification is concerned, with the New York City Health Department and the Maryland State Department of Health.

TABLE 48
SUMMARY OF ACTIVITIES SHELLFISH
AND CRUSTACEA PLANTS

Description	Operating Certificates Issued	State Visitations Made	New Plants Constructed	Plants Remodeled
Oyster Shucking and Packing..	62	467	8	12
Oyster Shellstock Only	32	55	2	2
Scallop Shucking	19	78	....	....
Clam Shucking	7	....	....	....
Crabmeat Processing	33	216	3	5
Repacker	8	18	1	3
Reshipper	1	....	....	1

RELATED SHELLFISH AND CRUSTACEA ACTIVITIES

Oyster growing area waters samples bacteriologically tested	1256
Oyster meat samples bacteriologically tested	66
Crabmeat samples bacteriologically tested	401
Plant water samples bacteriologically tested	210

SUBDIVISION SANITATION (Fringe Area Development)

The bureau continued its assistance program to housing development in the state by providing consultation services and exercising supervision over the public health aspects of subdivision planning and home construction. To promote improved public works in keeping with population density trends, conferences were conducted routinely with developers and builders, architects and consulting engineers, as well as with housing, zoning and public health officials at local, state and federal levels. Greater emphasis was placed during the period on the essential need for community utilities to serve urban populations and thus avoid future possible public health nuisances and hazards.

There was about a one-third reduction in the number of subdivision cases processed as compared to 1958, which is due in part to County Health Departments assuming more direct responsibility in this phase of community health. From Table 49 it will be observed that while the rate of new subdivision growth is approximately at the same level as the previous year, there was a 50 per cent reduction in the incidence of extensions to existing subdivisions.

The continuing cooperative program was federal housing insuring agencies was pursued with encouraging results. Joint area meetings with health department staffs were held at intervals in the year by the bureau and the Federal Housing Administration to resolve problems and acquaint them with new standards and procedures. A total of 1239 cases were processed involving FHA applications. This is an increase of 755 over 1958 and denotes the activity in 49 counties. There were 668 Veterans Affairs Final Inspection cases submitted for review and recommendations on proposed sanitary facilities by 14 County Health Departments. The highest number of cases noted was in Dade County with 503 FHA and 581 VA. In the overall program, 14 VA cases and 10 FHA cases were unsatisfactory. The total projects analyzed concerned sewage disposal systems for individual homes; however, 47 VA propositions were also related to the suitability of domestic water supply wells.

TABLE 49

SUBDIVISIONS REVIEWED ACCORDING TO THE NUMBER OF CASES PER COUNTY, THE NUMBER OF LOTS PER CASE AND THE DISPOSITION OF CASES PER COUNTY, (1959)

COUNTY	Number of Subdivisions	New Subdivisions	Extension to existing subdivisions	Total Number of Lots	Number of Lots Processed as Satisfactory	Number of Lots Recommended Sewers	Number of Lots Processed Unsatisfactory
Alachua	12	10	2	540	20	520	
Baker	1	1		12	12		
Bay	5	2	3	83	37	46	
Bradford	1	1		800	100	700	
Brevard	3	2	1	92	59	33	
Broward	14	7	7	589	228	361	
Clay	2	2		20	20		
Collier	1	1		419		419	
Columbia	4		4	200	52	148	
DeSoto	1		1	18	18		
Duval	13	9	4	413	87	326	
Escambia	13	7	6	1,948	286	1,662	
Gadsden	2		2	216		216	
Gulf	5	3	2	129	26	103	
Highlands	3	1	2	339	50	289	
Hillsborough	62	34	28	899	333	566	
Indian River	1		1	10	10		
Levy	1	1		30	17	13	
Marion	3	2	1	121	99	22	
Monroe	1	1					
Nassau	1		1	20		20	
Okaloosa	5	2	3	205	47	158	
Orange	20	13	7	1,440	112	1,328	
Palm Beach	5	1	4	117	72	45	
Pasco	1	1		700		700	
Pinellas	3	1	2	82	1	81	
Polk	5	4	1	225	145	80	
St. Johns	4	4		224	50	174	
Santa Rosa	6	1	5	317	17	300	
Seminole	1		1	6	6		
Volusia	6	3	3	213	151	62	
Wakulla	1	1		2,000		2,000	
TOTALS	206	115	91	12,427	2,055	10,372	

Note: Unlisted counties presented no subdivision projects for review.

BEDDING ACT ADMINISTRATION

Florida's Bedding Inspection Program is a progressive activity that advances from year to year by steady increases in revenues and services rendered industry and the public. The national recognition received the prior year resulted in this state's organizational pattern and administrative procedures being accepted as models for the development of similar programs by other states, among them Maryland, Rhode Island and Virginia.

In 1959, the enforcement of statutory provisions realized the registration of a total of 4339 firms within the bedding industry. This figure includes 762 manufacturers, 327 renovators and 3250 retailers. Receipts from this source netted \$38,620 while \$50,800 were received from the distribution of bedding inspection stamps. The combined revenue represents more than a 25 per cent increase over that reported at the close of 1958.

The activities of 5 regional offices show that 5190 inspections were made with 9305 articles of bedding found in violation. Except for 160 items placed "off sale," these articles were permitted to be returned to the consumer market after discrepancies were corrected. This work was implemented by the laboratory analysis of 466 samples of filling materials. Failure to comply with acceptable standards was determined in approximately 20 per cent of the examinations. Most legal infractions observed in the period, however, were related to improper labeling and omissions in affixing required inspection stamps to identifications.

The utilization of the educational approach initiated the prior year was pursued with encouraging effect. Programs of instruction were presented at the University of Florida during the state meetings of home demonstration agents and home economic teachers. Specialized courses were given to their local counterparts in 40 counties. Personnel also participated in 10 county teacher workshops. A bedding exhibit was displayed on 20 occasions at state fairs, women's clubs, industrial and lay groups and is in continuous demand. The Division of Health Information provided assistance in these educational endeavors.

The state legislature amended the Florida bedding law to cover additional articles and filling materials. It also extended the scope of control over bedding operations and established clarification of the registration fee schedule. This action strengthened the program, which will be reflected in augmented annual incomes. A distinctive pamphlet on the amended law was prepared, of which approximately 2000 copies have been distributed to the industry.

POLK-HILLSBOROUGH COUNTY AIR POLLUTION CONTROL DISTRICT

HARRY E. SEIFERT, M.S., P.H. Eng.
Director

The first 2 months of this year were spent in setting up a chemical laboratory at 500 Third Street S. W., Winter Haven. Also during this

time 2 members were added to our staff and 1 resigned. All personnel including the office secretary were new to this project and only 1 of the 2 technical personnel had previous training or experience in this type of work. Also during this time reagents were standardized and analytical procedures worked out for the various fluoride determinations.

A public hearing was held in Winter Haven on February 27, 1959, by the Air Pollution Control Commission to determine if there was sufficient evidence to warrant the adoption of rules and regulations for Polk County. At this hearing, among those testifying were Dr. N. L. Garlick of the U. S. Department of Agriculture, Dr. R. L. Dains of Rutgers University, Dr. J. B. Crum, Veterinarian of Bartow, and Mr. Paul Hayman, County Agricultural Agent. It was agreed that the evidence warranted the enactment of rules and regulations. These rules and regulations went into effect April 14, 1959. The grasses containing 40 parts per million of fluoride (dry weight basis) were considered to produce harmful effects in cattle if fed over a substantial period of time and were considered to be evidence of air pollution.

Since very little was known regarding the severity and extent of fluoride contamination in this area, an attempt was made to collect samples and analyze them for this purpose. At first control stations were located approximately 20 miles from the triple superphosphate manufacturing plants, but soon it was discovered that the area of contamination extended further than this. Consequently sampling stations were established for 100 miles in 2 directions with stations located 25 miles apart. From this information it appeared that there was evidence of atmospheric fluorides at distances greater than 75 miles. Control stations were located at distances of approximately 100 miles.

Furthermore, considerable sampling was done with various types of vegetation such as orange leaves, grapefruit leaves, pine needles and various types of vegetables and fruit. It should be noted that in some locations the following amounts of fluorides were found — black-eyed peas, 93 ppm; string beans, 153 ppm; collards, 312 ppm; and turnip greens, 295 ppm. The leaves of the various plants are considerably greater in fluoride content than the vegetable itself. Corn is a good example of this, where 12 ppm of fluoride were found in the kernels and over 500 ppm were found in the foliage.

In July a hearing was held by the Air Pollution Control Commission in Plant City, at which time the Commission voted unanimously to create a district of all of Hillsborough County and all of its industries. Prior to this meeting, sampling stations had been established around the 2 phosphate plants in Hillsborough County so that information could be presented to the Commission for their consideration. The results of the following type of analyses were presented; filter papers, grass, pine needles, gladioli and a number of different vegetables.

Another hearing was held by the Air Pollution Control Commission in Tampa on October 2, 1959 at which time the same rules and regulations

previously adopted for Polk County were to be adopted also for Hillsborough County and took effect October 24, 1959.

After copies of the required questionnaires from each company had been received, arrangements were made to visit each plant. By the end of December all of the plants in Polk County had been visited with the exception of one. Also, one of the phosphate plants in Hillsborough County was inspected. A number of the plants had installed or were planning to install control equipment to reduce the atmospheric fluorides.

As previously noted, the sampling program was originally set up in order to obtain information which was not heretofore available. When it was decided to use grass as a criteria for safe levels of contamination, the sampling program was revised in order to place emphasis on this phase of the field work. At each station a so-called "bird-house," or static sampler, was located, and grass samples were also collected. When gladioli and citrus growers in Hillsborough County complained of fluorides, sampling stations were established in that county in order to present information at the hearing to assist the Commission in deciding what action to take concerning a district. After Hillsborough County was declared an air pollution control district, sampling stations were established around each of the 2 phosphate plants in that county. Since there were only a sufficient number of personnel to do a bare minimum amount of work, there has been a continual shift in sampling locations. In some locations it was apparent that the information being obtained was not as important as that which might be obtained at other locations, so there was a continual revision in the sampling program.

As the results of the analyses of the grass samples were evaluated, it became increasingly apparent that this information would be of limited use since there is such a variation in type, age, growth and animation. This variation has been reported numerous times and resulted in more emphasis being placed on the use of filter papers. At the October meeting of the Commission in Tampa, 2 tabulations were presented, 1 showing the fluorine concentrations at various distances from Winter Haven and the other, results of the preliminary work showing an index of contamination which was the relative fluorine concentrations in plant areas. The information contained in the later table was of such significance that additional refinements were made in the sampling program. With this information any improvements in controls at any one of the plants can be quickly evaluated, as well as any increase in contamination caused by a plant.

The Air Pollution Control Commission as listed for 1958 remained unchanged for the first part of the year. They were: A. V. Hardy, M.D., George Westbrook, Ph.D., A. P. McIntosh, B. R. Fuller, A. E. Hendrickson, Ph.D., Arthur Crago, E. T. Casler, T. H. Lipscomb, M.D., and W. D. Miller. Then following legislative action, the Commission was increased from 9 to 10 members. The term of B. R. Fuller expired and L. H. Wear and J. C. Garrard were appointed by the Governor.

TABLE 50
AREA INDEX
 INDEX OF ATMOSPHERIC CONTAMINATION — RELATIVE
 FLUORINE CONCENTRATIONS IN AREAS WITHIN A
 RADIUS OF 2 MILES OF EACH PLANT.

Area	No. Sample Days of Exposure	Daily Average Micro- grams F ⁻ per sample
1	204	27.8
2	567	59.4
3	472	97.2
4	93	30.1
5	598	46.4
6	103	41.7
7	688	98.4
8	325	50.7
9	450	95.5
10	168	54.4

Information in Table 51 was tabulated to show results of this method. The area around one of the plants has been selected to show the value of the index of contamination values and the results of analyses of the grass collected at these sampling locations. In viewing this table, it should be pointed out that additional control measures were installed in August and this is reflected in both the area index column and the accumulative index column. It will be noted that a substantial reduction has taken place in the fluoride emissions starting the latter part of the summer. For this area the results of the analyses of the grass samples are given in the last column and it is readily apparent that the results obtained from the filter papers and those obtained from the grass samples are not uniform. In fact, in some instances when the filter papers indicate a reduction in atmospheric contamination, the results from the grass samples show an increase in the amount of fluorides found in the vegetation.

TABLE 51

Period	Monthly Area Index	Accumulative Area Index	Grass, ppm F ⁻
March - April	85.5		
April - May	72.2	78.8	124
May - June	60.9	70.1	84
June - July	42.0	59.4	83
July - August	26.8	50.6	44
August - September	31.5	46.5	78
September - October	33.2	44.3	106

During the year, cooperation was extended to the medical and dental studies made in this area. A considerable number of human urine specimens were analyzed for fluorides and human teeth were submitted also for

fluoride analyses. For the state veterinarian laboratory, analyses were made of animal bones. During the year a number of talks were made including one at the Florida Section of the American Institute of Mining, Metallurgical & Petroleum Engineers, one at the Industrial Wastes Workshop and several at Sanitarians Intraining classes. During the year, other investigations were made of complaints regarding air pollution in Hillsborough and Polk Counties.

During July, the air pollution control district was transferred from the Bureau of Preventable Diseases to the Bureau of Sanitary Engineering.

The number and types of samples collected from June 1 to December 31 are tabulated below.

TABLE 52
 TYPE AND NUMBER OF SAMPLES COLLECTED

Month	Vegetation	Filter Paper	Rainfall	Others	Total
June	211	61	15	14	301
July	289	93	17	8	407
August	243	93	16	94	446
September	72	73	15	2	162
October	62	64	11		137
November	95	94	8	4	201
December	100	97		4	201
Total	1072	575	82	126	1855

TABLE 53
 ANALYSES OF SAMPLES JUNE 1 TO DECEMBER 31

Month	Vegetation	Filter Paper	Rainfall	Others	Total
June	79	13	15	20	127
July	87	83	10	7	187
August	63	97	25	20	205
September	101	22		2	125
October	112	4		2	118
November	63	123		4	190
December	44	67		9	120
Total	549	409	50	64	1072

The total number of samples analyzed during the year was 1525 and the total number of distillations was 2125. At the end of the year there were approximately 110 permanent sampling stations in existence. Personnel engaged on this project were 1 office secretary and 3 technical personnel. However, 2 of these latter did not report for work until after the first of

1959. Fortunately, during the summer months a high school student was engaged to wash glassware and help prepare samples in the laboratory. When it is considered only 3 persons were available for field and analytical work as well as preparing reports and other necessary office procedures, a vast amount of work was done. In order to accomplish these results a genuine interest and devotion had to be displayed in this work and a forty-hour week disregarded.

According to the figures furnished by the Florida Phosphate Council in November, the phosphate industry to date has spent on research development and installation of atmospheric control equipment, over six million dollars. At that time the amount of control equipment on order or being installed was \$978,680.00.

At the end of the year one plant had installed controls at its dry mill and one had installed a wet scrubber for process operations. Besides these installations, another plant was installing controls which were to reduce the atmospheric effluent 50 per cent. The outlook is for a substantial reduction in atmospheric contamination during the coming year.

On June 1, 1959, one qualified air pollution control sanitary engineer was added to the Central Office staff to plan a long-range air pollution control program for the state. In addition to this duty, he was assigned the responsibilities of handling all the air pollution control activities that could be handled at the present time. The following statistical summary will give briefly the activities that have been performed during the past 7 months.

AIR POLLUTION CONTROL

I. Activities

A. Complaints:

Investigations	30 (In 13 Counties)
Solutions Obtained	9
Pending	13
Solutions not technically nor legally possible at this time	2
Complaints with little or no basis.....	6

B. Technical Assistance Conferences	4
C. Talks	1
D. Conferences and Seminars	4
E. FAPCC Meetings	2
F. FAPCC Hearings	2

II. Complaints by Industry and/or Operations

1. Burning at Dumps	3
2. Sewage Treatment Plant Odor	1
3. Boiler	5
4. Jet Aircraft Exhaust	1
5. Foundry	1
6. Paint Spraying or Dipping	1
7. Refinery	2
8. Paper Mill	1
9. Municipal Incinerator	1
10. Naval Stores Extraction	1
11. Cement Plant	1
12. Sawmill	1
13. Limestone and Dolomite Processing	2
14. Asphalt Batch Plant	4
15. Crematory	1
16. Private Incinerator	1
17. Unknown or Miscellaneous Sources	3

III. Complaints by Contaminant (Some cover two or more categories)

1. Smoke	15
2. Particulate Fallout	19
3. Gases or Vapors	4
4. Odors	12

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BUREAU OF MENTAL HEALTH

WAYNE YEAGER, M.D., M.P.H.

Director

MELVIN P. REID, Ph.D.

Chief Clinical Psychologist

Mental illness continues to be a major public health problem in Florida. It is estimated that approximately 45,000 persons in the state are seriously incapacitated with mental and emotional illness and over 200,000 need the services of a psychiatrist or psychiatric facility. Based on careful studies in the United States, it is conservatively estimated that mental illness costs the state over \$98,000,000 each year, or approximately \$22 per person.

This bureau is concerned with the control and prevention of mental illness and the promotion of good mental health through efforts with community, state, regional and federal programs designed to maintain and strengthen the public mental health of Florida people. It works to strengthen and coordinate varied services and programs so there will be a minimum of duplication and a maximum of preventive mental health services.

The staff of this bureau consists of a medical director and consultants in psychiatry, public health administration, mental health and psychiatric nursing, psychiatric social work, psychology and the social sciences. A consultant to serve in a liaison capacity between the State Board of Health and religious organizations in the state is being recruited. A regional consultant for northwest Florida in clinical psychology and clinic administration was added to the bureau staff during the year.

Florida shares with the rest of the nation the task of dealing with the grim problem of mental illness with inadequate professional resources. The lack of professional manpower to meet the mental health needs of the state is becoming more critical as Florida's population increases. There is very little hope that an adequate supply of trained professionals will be forthcoming within the foreseeable future. To meet this manpower challenge the State Board of Health has engaged in an intensive program to find ways of spreading the professional skills of the psychiatrist, psychologist, psychiatric social worker and psychiatric nurse to as many persons as possible. In order to do this ways are being sought to use the traditional public health teams, consisting of health officer, public health nurse, sanitarian, clerk and health educator, to provide broad linkage between mental health professionals and the citizens of Florida. Emphasis in planning is on community-oriented mental health programs supplemented with close consultative relations with psychiatric, psychological and guidance clinics, social agencies and professional organizations.

The mental health worker program, which was started in 1949, is a unique and realistic program designed to meet the problem of professional manpower shortages and to extend mental health services to the greatest

possible number of people. There were 22 mental health workers assigned to County Health Departments during the year and it is expected that 26 will be working by the end of 1960.

As in the past, members of the bureau staff have participated in local, state, regional and national programs involving: parent-child relationships, adjustment of the aged, alcoholism, diagnosis and treatment of childhood emotional disorders, research and training in mental health, human relations in industry, the development of adult outpatient psychiatric services for indigents, follow-up studies for patients on trial visits from the state hospital, preadmission and concurrent assistance for state hospital patients and their families, services and programs for the retarded and brain injured, exceptional child programs in the public schools, the origin of delinquent behavior and preventive or control institutes, institutionalization of psychotic children and both formal and inservice training for mental health specialists and lay groups.

MENTAL HEALTH AND CHILD GUIDANCE CLINICS

The State Board of Health is now affiliated with 16 full time outpatient psychiatric and child guidance clinics. The bureau offers consultation and provides training and financial assistance to these clinics. During the year considerable reorganization has taken place in several of the clinics, resulting in improved services. The Clinical Services Center of the University of Florida has changed over to a different type of service and is now known as the University Counseling Center. The Child Guidance Clinic and the Adult Psychiatric Clinic of Escambia County have now combined into a single unit. The Mental Health Clinic of the Duval Medical Center Memorial Unit is now in full operation.

In addition to the full time clinics, the bureau provides statistical services and some specialized consultation for several part-time clinics and research projects. These organizations operate in several areas of mental health: alcoholism, community mental health, school mental health, aging, mental retardation, follow-up services for patients discharged from state institutions.

Recognizing that neither funds nor professional staff availability are likely to keep pace with Florida's tremendous growth, the clinics are making studied efforts to adapt to needs in accordance with priorities, the capacity of the clinic and maximum utilization of other professional personnel in the community. While the average clinic in the state devotes 20 per cent of its professional manhours to consultation, inservice training, education and community mental health planning, two of the clinics, Daytona and Gainesville, devote only 50 per cent or less to traditional clinical services such as diagnosis and treatment. Consultation with agencies such as the juvenile court, visiting nurse association, public health nurses in the County Health Department, principals' associations, welfare departments and others, is consistent with the philosophy of these public-health-administered services which contend that the ultimate public welfare is being served more effectively by this type of training orientation and consultation than by spending most of their time with patients in clinical activities.

Psychiatric consultation time, which has been one of the biggest deficiencies in the clinic program, has increased considerably. Seven clinics now have full time psychiatrists, and 4 have approximately 20 hours of psychiatric coverage available per week. The remaining 5 clinics are working toward increasing their psychiatric coverage up to a level commensurate with their needs and in compliance with the minimum standard of 20 hours per week recommended by the Florida Psychiatric Society.

TABLE 54

SOURCE OF TOTAL BUDGET FOR FLORIDA'S CHILD GUIDANCE
AND COMMUNITY MENTAL HEALTH CLINICS
AND AVERAGE CONTRIBUTED FOR THOSE CLINICS WHICH
RECEIVE FUNDS FROM EACH SOURCE
FOR PERIOD JULY 1, 1958 — JUNE 30, 1959
COMBINED REPORT FOR ALL 14 CLINICS

	State Govern- ment	County Govern- ment 1	City Govern- ment 2	Com- munity Chest 3	Patient Fees 4	Other Sources 5
Percentage	34.87	24.99	7.82	20.67	5.51	6.14
Average Am't in dollars	25,227	18,075	5,667	14,954	3,987	4,440

1. Based on 13 of 14 clinics
2. Based on 3 of 14 clinics
3. Based on 9 clinics who participate
4. Based on 9 clinics who charge fees
5. Based on 8 clinics who have other sources

The 16 clinics in operation during 1959 were:

Division of Mental Health, Alachua County Health Department,
Gainesville
Bay County Guidance Clinic, Panama City
Broward Mental Hygiene Clinic, Inc., Fort Lauderdale
Dade County Child Guidance Clinic, Miami
Duval County Child Guidance & Speech Correction Clinic,
Jacksonville
Duval County Mental Health Clinic, Memorial Unit,
Jacksonville
Escambia County Guidance Clinic, Pensacola
Hillsborough County Guidance Clinic, Tampa
Division of Mental Health, Leon County Health Department,
Tallahassee
Manatee-Sarasota Guidance Center, Bradenton-Sarasota
Orange County Guidance Clinic, Orlando
Palm Beach County Guidance Center, West Palm Beach
Child Guidance Clinic of Pinellas County, Inc., St. Petersburg
Mental Health Center of Polk County, Bartow
Indian River Mental Health Clinic, Fort Pierce
Volusia County Health Department, Mental Health Unit,
Daytona Beach

In addition to those above, the Duval Medical Center, Memorial Unit, Jacksonville, received some bureau funds, statistical and administrative consultation, and participated in the statewide uniform reporting system.

MENTAL HEALTH WORKER PROGRAM

Initiated several years ago, the Mental Health Worker Program in Florida is based on the idea that new and different techniques are necessary, if society is to cope with the ever-growing problem of mental illness. A realistic appraisal of this problem indicates that the professional schools are not now able to turn out enough skilled professional people to keep up with the needs and demands of communities.

This Program attempts to meet the problem by sending into a community an individual with some specialized training, in order to explore new ways of working toward mental health in that community. This individual at present must be qualified in 1 of 4 areas: public health nursing, social work, psychology or education.

The mental health worker is assigned to the County Health Department and is guided by the director. To date, 22 such positions have been established in various counties in Florida. An evaluation of results to this time indicates that the exploratory phase of this program is coming to fruition and that certain consistent patterns begin to appear.

At a recent conference (March 1959) of mental health workers, the pattern of activity had individual variations, but nonetheless followed a regular pathway. On entering a community, with an "open" field of operation, the mental health worker's first task is to establish himself as a useful person in the community. He accomplishes this by rendering individual service to patients and organizations in the community. This individual service is invariably oriented toward the worker's individual training, *e.g.* psychologic testing, social work interviews, educational programs in schools, follow-up care of psychiatric patients. In performing this service, the mental health worker comes to have a recognized position in the community and is sought out as a resource person. In addition, such service affords the mental health worker an opportunity to become intimately involved in the activities of professional personnel and organizations in the community.

After this first phase—the rendering of individual service—is well underway, the worker then extends his field of operations into more public health activities. Using his position and his contacts, he proceeds to enlist voluntary and governmental agencies in treatment or preventive programs. As this is gradually accomplished mental health work is more and more carried on by the existing facilities of the community. The manpower, the financial resources and the treatment facilities thus made available are enormously greater than that which could be obtained by the addition of any number of professional people into the community.

With individual variations, the pattern described above has been followed by practically every mental health worker. One point is of crucial

importance. The worker, from the start, must render some individual service in order to obtain status. At early stages of the program, however, he must carefully avoid spending more than a portion of his time in such service. If he becomes over-involved he will be hampered in his later efforts to deal with the broad social structure, and efforts to disentangle himself can result in misunderstanding and hostility on the part of clients and personnel of associated agencies.

It must be emphasized that this Program is still in an early phase of growth and development. Nonetheless, results to this point justify its continuation and expansion, as the methods of refining the techniques described are further explored.

EDUCATIONAL ACTIVITIES

The purpose of the educational activities of the bureau is to help public health personnel sharpen their skills in mental health principles and practices. As in previous years, the bureau participated with finances, leadership and co-sponsorship in many different types of educational and training programs.

The bureau, in joint sponsorship with the Division of Public Health Nursing offers workshops on Leadership and Interpersonal Skills in Mental Health and Psychiatric Nursing for small groups (8-10) of public health nursing supervisors, using a combination of lecture presentation of didactic material, with discussion of the material presented, and review and discussion of interaction notes on a work experience which each participant is asked to prepare and bring to the workshop. Faculty is selected from the behavioral sciences and two or more nurse specialists in mental health in public health and psychiatric nursing.

Two to three months following each workshop a one-day *follow-up conference* is held at which time participants are asked to identify the ways in which they have used learning experiences of the workshop and to bring any questions they would like discussed.

State hospital directors of nursing services and directors of public health nursing services of County Health Departments attended and participated in several sessions of the annual conference of mental health and child guidance clinic personnel in 1959. This has stimulated an increase in cooperative planning and coordination of services between public health nurses and clinic staff, and enhanced the existing relationship between public health and hospital nursing services which is an outgrowth of the orientation program provided for public health nurses in state hospitals.

Interdisciplinary workshops on Human Relations and Leadership Skills are being offered through joint sponsorship of the Division of Public Health Nursing and the bureau, in cooperation with, and at the request of, County Health Departments and local voluntary and official health and welfare agencies. Staff members from the bureau and clinics have served as resource persons and faculty.

A director of a County Health Department nursing service was given financial assistance to attend the University of Minnesota School of Public Health to study mental health in public health; another to attend the Fourth Community Mental Health Workshop, Pisgah View Ranch, Candler, N. C.

Four members of a county public nursing staff are enrolled in a Seminar in Problems in Psychiatric Nursing given by the St. Petersburg Junior College and co-sponsored by the Council on Training and Research in Mental Health.

The mental health nurse consultant completed an academic year in consultation at Columbia University.

The State Board of Health conducted a workshop for psychologists on October 29-30-31, 1959, in Jacksonville. Topics covered in this workshop were: Significance of Brain Lesions in Adoptive Potential, Group Methods with Parents and Play Therapy.

The bureau continued providing consultants and financial assistance for human relations workshops and institutes, with several state and local agencies such as Florida Congress of Parents and Teachers, Vocational Rehabilitation Service, local PTA's, mental health associations, Florida Alcoholic Rehabilitation Program, University of Florida and others.

CONSULTATION SERVICES

This bureau is a consultative body for mental health programs in the state. During 1959, consultation was available from specialists in psychiatry, clinical psychology, psychiatric social work, psychiatric and mental health nursing and social science. Consultation, including assistance with inservice training of professional and non-professional nursing staff is being offered to state, private and community hospitals caring for psychiatric patients. As an example of the latter, the psychiatric nursing consultant from this bureau and the Mental Health Nurse Consultant from the Regional Health, Education and Welfare office led a 2-day discussion of the implications and requirements for effective nursing service to psychiatric patients as 1 facet of a hospital's preparation to open a psychiatric unit.

FOLLOW-UP SERVICES

During 1959 the staffs of the bureau and the County Health Departments continued to give strong support to patients and families with problems of mental ill health.

In 38 counties both mental health workers and public health nurses made field and office visits to patients. Some patients received 1 visit; other patients received visits monthly, or more frequently if public health

personnel judged the need warranted more intensive services. In 28 counties, public health nurses and health officers included services to furlougees in their regular schedules of activity.

Of the approximately 6000 persons admitted to mental health services by public health personnel, nearly 2000 were patients on furlough or trial visit.

TABLE 55
SUMMARY OF MENTAL HEALTH ACTIVITIES
LOCAL HEALTH DEPARTMENTS 1959

	Number Patients Admitted to Service 1959			Number Field Visits		Number Office Visits	
	Child	Furlougee	Other Adults	Patients	Family	Patients	Family
Public Health Nurse.....	1,114	1,430	1,062	5,298	5,667	1,408	2,236
Mental Health Worker.....	885	587	827	1,816	4,284	1,756	4,889
Health Officer.....	657	129	188	103	103	2,375	1,104

RESEARCH ACTIVITIES

Although research has not been a major program in previous years, the professional staff of the bureau is now spending an increasing amount of time assisting County Health Departments, guidance clinics and other agencies in planning and conducting research in the field of mental health. The following are some of the research projects in which the bureau has been most active during the year:

(1) Hillsborough County Mental Health Resource Council. Essentially the research aspects of this project involve an attempt to evaluate the effectiveness of a coordinated community program that has been developed to aid in the rehabilitation of former mental patients and their families. (At present the Council has a total membership of 32 community agencies and organizations.) Basically the plan of evaluation that is being employed is that of comparing the readjustment (occupational, family, community, etc.) of former mental patients in Hillsborough County with those in a similar county which does not have a coordinated program for this purpose. In order to evaluate the effectiveness of the program, all former mental patients in each county will be interviewed by a trained social worker one year after they have been furloughed or discharged from a mental institution. The study will continue for a period of 12 months.

(2) Seminole County School Mental Health Demonstration Project. The aim of this project is to determine how rural areas, which have

only limited professional mental health personnel, may utilize their existing resources to develop more effective mental health programs. To date considerable progress has been made in demonstrating how emotionally disturbed school children may be helped to make a better adjustment through the cooperative efforts of teachers and public health nurses. In this aspect of the study, a great deal has been learned about the dynamics of the behavior of the disturbed child in the school setting.

(3) Duncan U. Fletcher School Health Study. In this project various members of the bureau staff worked cooperatively with the staff of other bureaus and divisions within the State Board of Health, Duval County Health Department, and the faculty and staff of the Duncan U. Fletcher High School, in conducting a large scale school health study. Since this was a pilot study, the staff attempted to develop methods of studying certain mental health aspects of the social environment of the school child.

During 1959 initial steps were taken toward several cooperative research projects involving all the child guidance and mental health clinics affiliated with the State Board of Health. Specific problem areas have been defined and research design is now being completed.

In addition to the preceding, the bureau staff participated to lesser degree in several other research projects. At present plans are underway for conducting cooperative research projects with the Florida Alcoholic Rehabilitation Program and with several County Health Departments and child guidance clinics. Since many of the mental health programs in the state are now reaching a point of stability in staff and program, it appears that in the future an increasing amount of the time of the bureau staff will be devoted to research devised to evaluate the effectiveness of existing programs and to develop more effective methods of preventing and treating mental disorders.

Article by staff members:

Gorman, Joanna F. and Levine, David L. Some Immediate Concerns of Social Service Departments in State Hospitals for the Mentally Ill and Mentally Retarded. Florida State University: *Research Reports in Social Science*, Vol. II, 1-74, August 1959.

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TABLE 57 (Continued)
 DISCHARGED PATIENTS BY AGE, RACE, SEX, DIAGNOSIS, AND NUMBER TREATED
 FLORIDA CHILD GUIDANCE CLINICS
 JANUARY 1, 1959 — DECEMBER 31, 1959

DIAGNOSIS	Total Patients	AGE IN YEARS								RACE AND SEX				Number Treated	
		0-4	5-9	10-13	14-17	18-20	21-29	30-44	45-64	65 & Over	White		Nonwhite		
											Male	Fem.	Male		Fem.	Male	Fem.
PSYCHONEUROTIC DISORDERS															
Anxiety Reaction.....	196		59	55	31	6	19	23	3		120	72	3	103	
Disassociative Reaction.....	18			6	3		5	3	1		6	11		9	
Conversion Reaction.....	23		2	4	10	1	1	5			8	14	1	11	
Phobic Reaction.....	12		3	4	1		3		1		3	9		7	
Obsessive Compulsive Reaction.....	19		6	6		2	2	3			11	8		9	
Depressive Reaction.....	42		1	7	3	3	15	6	6	1	8	33	1	24	
Psychoneurotic Reaction, Other.....	35		4	11	4	2	6	7	1		14	21		17	
PERSONALITY DISORDERS															
Personality Pattern Disturbance.....	237	1	26	59	73	8	24	34	12		146	86	1	4	
Personality Trait Disturbance.....	566	4	105	183	134	22	45	57	6		376	180	7	3	
Sociopathic Personality Disturbance.....	93		6	26	38	2	10	10	1		57	24	9	21	
Special Symptom Reaction.....	84	10	43	21	5	2	3				64	15	1	4	
TRANSIENT SITUATIONAL PERSONALITY DISORDERS															
Gross Stress Reaction.....	9	1	1	1		1	1	3	1		4	5		4	
Adult Situational Reaction.....	52		2			6	17	25	3	1	16	29		41	
Adjustment Reaction of Infancy.....	539	42	325	166	6						363	155	12	9	
Adjustment Reaction of Childhood.....	295		1	84	196	13	1				159	121	8	7	
Adjustment Reaction of Adolescence.....	4								4			4		3	
Adjustment Reaction of Late Life.....	5	1		2	1				1		2	3		2	
Other.....															
NO PSYCHIATRIC DISORDER FOUND															
	419	59	26	19	68	164	72	7	4		325	87	1	6	
NO DIAGNOSIS MADE															
	2,327	150	446	366	320	330	410	229	63	12	1,420	785	69	53	

FLORIDA COUNCIL ON TRAINING AND RESEARCH IN MENTAL HEALTH

The Council consisted of the following members for 1959:

John T. Benbow, M.D., Macclenny, Chairman
 William M. C. Wilhoit, M.D., Pensacola, Vice Chairman
 Mrs. Eunice P. Anderson, Miami
 Mr. Loyal Frisbie, Bartow
 Mrs. E. W. Gautier, New Smyrna Beach
 Victor B. Johnson, Ed.D., Tallahassee
 Mrs. Sonia L. King, Miami
 Major General J. K. Lacey, Panama City
 Canon Robert J. McCloskey, Jacksonville
 Coyle E. Moore, Ph.D., Tallahassee
 Kent Miller, Ph.D., Tallahassee
 Melvin P. Reid, Ph.D., Jacksonville

Dr. Wilhoit was elected Chairman and Dr. Reid was elected Vice Chairman and Secretary for the fiscal year beginning July 1. Dr. Reid resigned his membership on the Council effective August 1959 because of out-of-state educational leave. Dr. Kent Miller, director of the Leon County Clinic, was appointed to fill this vacancy. Six meetings were held, two in Jacksonville, two in Tallahassee, one in Sarasota and one at the Northeast Florida Hospital, Macclenny.

The Council was created by the 1955 Legislature to advise and consult with the State Board of Health in the training of professional personnel and the conducting of research in the mental health field. The 1959 Legislature amended the Statutes by requiring repayment of scholarships to be either by services in the employ of the state or by money.

On recommendation of the Council, the State Board of Health awarded a total of 37 stipends in psychiatry, clinical psychology, psychiatric nursing and psychiatric social work. (See Scholarships for Professional Education elsewhere in this Report).

During the year the Council transferred its psychology units from guidance clinics to the psychology departments of the University of Miami and the University of Florida; co-sponsored with the Florida Association of Mental Health several appearances in Florida of Dr. Bertram Mandelbrote to speak on "The Open Door Hospital;" sponsored graduate conference on internship training at the University of Miami Department of Psychology; sponsored 2 institutes on inservice training in psychiatric nursing and co-sponsored college credit short courses in psychiatric nursing.

Due to a cut to \$15,000 per year in the appropriation for research, all project directors were asked to re-submit a research design and budget. On recommendation of the Council the State Board of Health approved \$8985 for research as follows:

Dr. Carl D. Williams, University of Miami, for completion of study on Relation between the Authoritarian Ideology of Young Adults	\$1035
Study at South Florida State Hospital on Cerebral Metabolism of Certain Blood Elements in Mental Illness	550
Florida State University for Study of Mental Ill Health in a Florida County	6000
Pinellas County Board of Public Instruction for completion of analyses of data on study of the Emotionally Disturbed Child	1000
Dr. Haim G. Ginott, Child Guidance Clinic, Jacksonville for study on Familial Figures in Children's Rorschachs.....	400

BUREAU OF NARCOTICS

FRANK S. CASTOR, Ph.G.
Director

This bureau reports an increase in arrests over last year. At first glance this may appear disturbing but an analysis of these arrests shows a closer cooperation with other law enforcement agencies which has led to the upswing in statistics. Also the general public, made aware of this narcotic menace through the bureau's educational program, is giving the district offices much needed information.

The state is divided into 4 districts. The Northwest District with offices in Tallahassee is staffed with 1 narcotic inspector. The Northeast District, Jacksonville, has 3 narcotic inspectors. The Southwest District, Tampa, employs 2 and the Southeast District, Miami, has 3. The offices at Jacksonville, Tampa and Miami each have a city detective assigned full time.

The bureau's central office is located in Jacksonville and functions as a clearing house for all matters of an administrative nature, renders assistance to the district offices, maintains records of all criminal cases, general investigations, registration of drug stores, registration of practitioners of the healing arts, physical therapists, masseurs and chiropractors. The bureau cooperates very closely with local police and sheriffs' offices as well as with the federal narcotic inspectors, customs agents, etc.

The primary responsibility of the bureau is the control of narcotics, legal and illegal. Through the licensing of practitioners, hospitals, drug stores and others permitted by law to administer or dispense narcotics, the bureau is able to keep a tight check on addicts. All inspectors have police power to make arrests and assist local and other state officers in preparing cases against violators. Similar statutes have placed the responsibility on this bureau for the control of barbiturates and amphetamines.

The bureau made 214 arrests during the year; 152 of which were for narcotic violations. As in 1958, the majority of these violators were found to be nonwhite young adults living on the lower East Coast. Several arrests were made there in cooperation with the Federal Bureau of Narcotics.

For the first time in several years, cocaine was found being imported illegally through the Port of Miami. The state remains comparatively free of heroin but marihuana continues to be the major problem. The misuse of paregoric has become a serious situation and the bureau finds that addicts, unable to obtain the more strongly addicting narcotic drugs, resort to purchasing paregoric, boiling it down and shooting it directly into the vein.

Sixteen persons were committed for addiction last year, a majority of them being paregoric offenders.

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Sixteen persons were committed for addiction last year, a majority of them being paregoric offenders.

Arrests in categories other than narcotics totalled 46, which is an increase over last year. (12 pharmacy, 3 medical and 31 barbituate and amphetamine violations).

Of major interest were arrests made in the Tampa and Jacksonville areas of narcotic addicts charged with breaking and entering drug stores to obtain their supply of narcotic drugs. While charges in most cases were not made for narcotic violations, the inspectors are to be congratulated for the work done by them in cooperation with the police departments, and sheriffs' offices throughout the state as well as in Atlanta, Georgia in breaking up a ring of drug store burglars.

A major capture of illegal amphetamine drugs was made in the Miami District by the bureau's inspectors with the purchase of 50,000 amphetamine tablets. In addition 38,000 tablets were found in the defendant's car which was seized. Later an additional 50,000 were seized as contraband when the shipper was unable to deliver to the defendant. Close cooperation with the Federal Food and Drug Administration is resulting in more arrests of this nature.

In all categories, the state courts imposed greater sentences and higher fines than in previous years. Over the years it has been proven that where convictions are the surest and sentences most severe, the narcotic violators are less prevalent than in places where the violator knows he can expect leniency.

The number of varied investigations by the bureau in 1959 rose from the previous year's 1681 to 1846. Accusations and allegations, in some instances, were unfounded.

EDUCATION

The bureau officers made 80 talks to some 3000 persons. This was an increase over last year. The talks and demonstrations were made before civic groups, PTAs, schools, universities, police training classes, nurses, pharmaceutical and medical groups.

The inspectors advised druggists and hospital administrators, and gave instructions as to how better to comply with the state laws.

During the year all physicians and pharmacists were reminded by personal letter that Type A—the major addictive narcotic drugs—could not legally be prescribed by telephone. It is the feeling of the bureau that if this law is strictly followed, the drifter will be unable to obtain narcotic drugs from legal sources. It has been the experience of the bureau that addicts unable to find narcotics resort to obtaining the drugs through fraud from practitioners by feigning various illnesses, especially kidney colic.

With arrests, when necessary, and with education and assistance where indicated, the personnel of this bureau carries on its fight against the narcotic seller and addict. The bureau also works to eliminate the false practitioner of the healing arts and all others who would for selfish gain or temporary physical gratification break the laws set up by the Florida Legislature to protect the people of Florida.

TOTAL SUMMARY OF ACTIVITIES

Number open inspections	2594
Number investigations	1846
Number arrests	214
Number violations corrected where no legal action was taken	62
Aggregate sentences imposed by the courts	210 years
Aggregate fines imposed by courts	\$4700.00
Defendants receiving probation, deferred, withheld or suspended sentences	45
Cases discharged or nolle prosequi by the courts	10
Cases placed on absentee docket	5
Number narcotic addicts confined to state or federal institutions for treatment	16
Number persons acquitted by the courts	11
Number persons declared insane	1
Number talks made	80
Number drug stores registered for 1959-60	1367

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TABLE 58

MEDICAL PRACTITIONERS REGISTERED WITH THE BUREAU OF NARCOTICS BY PLACE OF RESIDENCE AS OF DECEMBER 31 1959 (EXCLUDES DECEASED PRACTITIONERS)

County	Total	Medical Doctors	Osteo-paths	Chiro-Practrers	Naturo-paths	Chiro-po-dists	Physio-therapists
Total in State...	6,195	4,810	424	490	164	133	174
Alachua...	116	105	2	4		1	4
Baker...	2	2					
Bay...	50	39	4	5		1	1
Bradford...	10	8	1	1			
Brevard...	86	71	2	12		1	
Broward...	463	329	61	35	12	9	17
Calhoun...	4	3		1			
Charlotte...	8	7		1			
Citrus...	7	6					1
Clay...	11	11					
Collier...	16	14	1	1			
Columbia...	14	11		2			1
Dade...	1,808	1,436	114	113	55	44	46
DeSoto...	9	8	1				
Dixie...	1	1					
Duval...	529	456	16	29	9	7	12
Escambia...	146	129	1	10		2	4
Flagler...	2	2					
Franklin...	7	5	2				
Gadsden...	20	19	1				
Gilchrist...	1	1					
Glades...	1	1					
Gulf...	5	5					
Hamilton...	4	4		1			
Hardee...	8	7					
Hendry...	6	5	1				
Hernando...	7	6	1				2
Highlands...	25	19	2	3			9
Hillsborough...	421	324	20	33	27	8	
Holmes...	3	3				1	
Indian River...	18	15	2				
Jackson...	19	16	1	2			
Jefferson...	4	4					
Lafayette...	2	2					
Lake...	60	40	4	11	1	2	2
Lee...	53	40	4	5	2	1	1
Leon...	87	70	4	5	2	2	4
Levy...	3	3					
Liberty...	0						
Madison...	7	6	1				
Manatee...	76	50	9	11	4	1	1
Marion...	49	42	3	4			
Martin...	8	8					
Monroe...	30	24	1	3	1		1
Nassau...	8	7		1			
Okaloosa...	25	21		3	1		
Okeechobee...	4	3		1			
Orange...	358	266	30	34	7	6	15
Osceola...	15	10	3	2			
Palm Beach...	814	245	15	34	4	8	8
Pasco...	27	15	8	4			
Pinellas...	574	385	67	54	29	22	17
Polk...	202	164	8	18	2	5	5
Putnam...	21	15	1	4	1		
St. Johns...	21	17	1	2		1	
St. Lucie...	30	26	2	1		1	
Santa Rosa...	10	9		1			
Sarasota...	137	99	4	13	3	4	14
Seminole...	35	29		4	1		1
Sumter...	3	2	1				
Suwannee...	6	5		1			
Taylor...	8	5		2	1		
Union...	1	1					
Volusia...	172	115	24	17	2	6	8
Wakulla...	3	2	1				
Walton...	7	6		2			
Washington...	8	6					
Out of State...	2,785	2,413	152	126	11	47	36
TOTAL...	8,980	7,223	576	616	175	180	210

BUREAU OF ENTOMOLOGY

J. A. MULRENNAN, B.S.A.

Director

This bureau is concerned with the control of arthropods which affect the health and comfort of the people in Florida, and is also responsible for enforcement of the law pertaining to Structural Pest Control.

In the control of arthropods, the bureau gives technical assistance in the planning and execution of arthropod programs, including financial assistance with state funds, to 50 of Florida's 67 counties.

The central office field staff at the end of the year, aside from the director, included 1 sanitary engineer, 1 clerk and 1 structural pest control entomologist working throughout the entire state. The staff entomologist, in charge of entomological field activities, resigned in July to accept the position of director of Volusia County Anti-Mosquito District. This position has not been filled. A vacancy existed for several weeks in the position of the structural pest control entomologist, due to resignation, but was filled in March.

A regional entomologist was added to the central office staff in February to work primarily in the northeast region of the state, and with the districts in the proper application of Paris green pellets as a mosquito larvicide.

Program activities remained about the same in 1959 as in previous years. In some areas where substantial progress has been made in reducing the number of salt-marsh mosquitoes through permanent control measures, the need for controlling fresh water mosquitoes becomes more apparent. The overall production of mosquitoes during the 1959 season could be classed as moderate for the year; however, due to greater than normal rainfall, the fresh water mosquito breeding was heavier than in past years. The Glades mosquitoes (*Psorophora confinnis*) were extremely bad in some sections during the early spring and continued to be troublesome throughout the summer months. The *Culex* and *Anopheles* mosquitoes were also unusually numerous due to the heavy rainfall.

An outbreak of encephalitis occurred in Pinellas County during the fall of 1959. (See report of Division of Epidemiology elsewhere in this Report). Personnel from this bureau made extensive investigations as to the species of mosquitoes, and densities present. Unfortunately, the outbreak was nearing its peak before this office was advised of the situation. Inspections indicated that the density of all mosquitoes was low in those areas where the greatest number of cases occurred. *Culex nigripalpus* mosquito breeding was generally higher in the county than had been experienced in recent years. This species breeds in impoundments, sewage effluent, grassy roadside ditches and other man-made excavations. Although at this time, the mode of transmission, or the vector, has not been established for this encephalitis outbreak, there is a possibility that *Culex*

nigripalpus mosquitoes played a part, since it has been found naturally infected with Eastern encephalitis in Trinidad.

The outbreak of encephalitis in the human population points up a greater need for broader coverage of mosquito trapping in populated areas to determine the density and distribution of mosquitoes. Expanded mosquito identification services would also be required. The trap densities should be used as a criteria as when to carry out adulticiding measures.

TEMPORARY CONTROL MEASURES

The chemical formulations, rates of application, techniques and methods for killing adult mosquitoes and mosquito larvae, as developed by the Entomological Research Center at Vero Beach, have proven to be extremely effective. It has been observed, however, that some species of mosquito larvae are not as effectively controlled with Paris green pellets as are other species, *Culex nigripalpus* being one specie which does not readily succumb to Paris green.

In ground adulticiding work, approximately 122 machines were used by 47 counties in applying 1,140,220 gallons of insecticidal formulation plus 109,000 pounds of insecticide during the year. Machines used were principally Tifas' and Dynafogs' for ground fogging. The Buffalo Turbine and Bean Power Sprayer were used in Dade, Martin, Palm Beach, Orange and Osceola Counties for adulticiding by dusts or sprays. At an average labor cost of \$0.66 per mile, the 47 counties expended \$156,850.00 for 109,700 man hours required to fog or spray 236,522 miles.

Airplane adulticiding work was also carried out in Dade, Broward, Indian River, Brevard, Lee, Sarasota and Volusia Counties. Malathion 90 per cent (3 gallons to 97 gallons fuel oil) is the insecticidal formulation usually employed. This was applied in populated areas as a spray at the rate of from 2 to 3 quarts per acre.

Brevard County has equipped one airplane to perform aerial fogging, using a malathion-fuel oil mixture. Tests show this type of equipment and application to be very effective when applied under proper conditions.

The Paris green pellets developed by the ERC are beginning to be more widely used for control of larvae, replacing to some extent the use of fuel oil for this purpose. Facilities have been set up by the Indian River County Mosquito Control District to make the pellets. Paris green may be safely used in mosquito breeding areas without fear of damage to fish and wildlife, and it is not foreseen that mosquitoes can develop a resistance to the chemical.

DOG FLY CONTROL

This is a problem existing only in West Florida. Dog fly breeding occurs in deposits of grass washed up on the shoreline of inlets and bays of the Sound, extending from St. Marks to Pensacola. The normal breeding

season is from July through October. Control measures consist of spraying the grass deposits with a 5 per cent DDT water solution at weekly intervals.

The 1959 season was one of very light infestation with only one noticeable three day flair-up in September. A considerable amount of rain was experienced almost daily during August. Weather conditions permitted discontinuing control operations by the end of October.

Control measures were carried out in the Tyndall Field area by the Bay County Pest Control Unit. No control work was done on this U. S. Government area in 1958, and heavy concentrations of dog flies appeared on the reservation because of lack of control.

Control measures were carried out by 7 counties. Labor costs per mile for the 2828 miles treated, ranged from \$1.51 in Okaloosa County to \$13.02 in Wakulla County. The average labor cost was \$4.87 per mile. A total of 24,771 gallons of 35 per cent DDT concentrate was applied, requiring 12,070 man hours at a cost of \$13,771.00

ENTOMOLOGICAL ACTIVITIES

The essential work of the 5 regional entomologists has centered around giving assistance and advice to the counties and the mosquito control districts in studying various arthropod problems. In the course of the work, it has been necessary to review and give actual assistance in proposed projects, work plans and budgets and to evaluate larviciding and fogging operations.

The regional entomologists have recommended control methods to prevent fly breeding in vegetable refuse from packing plants and in the manure around broiler and egg installations. Another major problem centers around assistance in enforcing and collecting evidence for the Florida Structural Pest Control Board.

The Florida State Park management has complimented the mosquito control program during the past year and has cited figures of attendance, particularly campers, to show a marked increase over past years in parks that have become relatively free of mosquitoes. This represents a great increase in tourist revenue to these areas.

Studies have been made of the sanitary landfills operated by a mosquito control district to determine the cost of garbage disposal by this method. As operations were conducted in this study, the sanitary landfill appears much more economical than other methods of disposal, particularly the method of chemical treatment being promoted by a fertilizer company, and in addition makes otherwise relatively worthless land available for public use and enjoyment.

MALARIA AND TYPHUS SURVEILLANCE

Malaria and typhus fever have continued at a very low point during the past year. There were only 2 cases of malaria and 4 cases of typhus reported. Of the 2 cases of malaria reported 1 was found in a seaman who regularly travelled to South America. The second case was not confirmed by a positive smear; the patient did not return the questionnaire which was sent to a Miami hotel address so it cannot be credited to local transmission. There has been no definitely proven malaria transmission in Florida since 1948.

ARTHROPOD IDENTIFICATION LABORATORY

The identification work was severely handicapped the past year by the resignation of one of our biologists. This placed a tremendous burden on the other biologist who had to train a new person as well as take care of all the reception of specimens and the shipment of collecting material to the light trap cooperators in the field.

It is essential that this office know at all times the relative density of mosquitoes in order to know how effectively control operations are being carried out. The threat of encephalitis makes identification and the operation of light traps to sample the mosquito population all the more necessary.

In 1959 a total of 150 light traps were operated in the state and 12,510 collections were identified. There were 12 special collections identified and 2801 larvae identified from 78 collections.

ENGINEERING ACTIVITIES

The field activities of the one sanitary engineer, working throughout the entire state, consisted primarily in assisting counties and districts in program planning and budgeting; review of areas having received entomological approval and proposed for permanent control measures; assisting directors in selecting method of permanent control applicable to each particular area; project planning; giving engineering approval for project construction; and review of construction work in progress, and completed. Assistance is given in the development, preparation and maintenance of financial and accomplishment records and reports. Boards of Commissioners were advised upon occasions pertaining to arthropod problems within their jurisdiction; and in cases of new counties contemplating participating in the program, the Commissioners were advised as to the best information available concerning the problems in their county, recommended program and requirements for receiving state aid funds.

STRUCTURAL PEST CONTROL

Under the Structural Pest Control Act, the State Board of Health has the responsibility for promulgating rules pertaining to the Act. The Board has authority to appoint inspectors whose responsibility is to report any

violations of the Act or rules to the Board and the Pest Control Commission.

The 1959 Legislature amended the Structural Pest Control Act and also repealed and placed the Thermal-Aerosol Act's functions in the Structural Pest Control Act.

It was necessary for the Board to amend the Structural Pest Control rules in order to comply with the amended Act and to strengthen certain provisions of the rules. The amended rules were to be placed before the members of the Board for adoption on February 9, 1960.

The entomologist in charge of structural pest control enforcement has had an extremely busy year in answering complaints, making inspections on reports from home owners. The preparation of reports and meetings with the Pest Control Commission has taken considerable time, since there has been a number of hearings during the year. The entomologist has also participated in the training of county sanitarians and in the Pest Control short course at the University of Florida.

SUMMARY OF STRUCTURAL PEST CONTROL ADMINISTRATION
AND ENFORCEMENT IN THE STATE OF FLORIDA

Registration	Calendar Years				
	1947	1956	1957	1958	1959
State Board of Health Licenses issued	144	210	226	228	228
State Board of Health Licenses revoked		1	2	0	2
State Board of Health Licenses placed on probation			6	1	0
Employees' Identification Card Licenses issued	456	1485	1738	2152	2232
Employees' Identification Card Licenses revoked					8
Thermal-Aerosol Certificates of Authorization issued			4	2	3
Thermal-Aerosol Certificates of Authorization renewed		14	13	14	14
<i>Investigations</i>					
Home owner complaints investigated		90	91	97	162
Number of non-licensed questionable illegal pest control operators investigated		15	22	5	9

COUNTIES PARTICIPATING AND LOCAL FUND BUDGETS

The following counties participated in the State Arthropod Control Program during the year. Based on the fiscal year of the counties, and as of the end of the calendar year 1959, the local certified budgets for arthropod control activities are shown as follows:

Alachua	\$ 17,000.00	Leon	\$ 30,000.00
Bay	51,002.25	Levy	10,000.00
Bay (Gulf Beaches)	31,389.54	Madison	1,325.36
Bradford	9,300.00	Manatee	49,000.00
Brevard	250,000.00	Martin	25,321.83
Broward	57,500.00	Monroe	88,000.00
Calhoun	2,500.00	Nassau	45,635.54
Charlotte	25,000.00	Okaloosa	15,000.00
Citrus	42,584.94	Orange	89,285.72
Collier	51,561.22	Osceola (Kissimmee)	5,255.00
Dade	206,098.00	Osceola (St. Cloud)	2,500.00
Duval	57,325.67	Palm Beach	173,230.00
Escambia	75,907.15	Pasco	21,531.20
Flagler	12,781.29	Pinellas	223,110.16
Franklin	9,000.00	Polk	147,655.50
Gadsden	1,900.00	Putnam	15,000.00
Gulf	21,500.00	St. Johns	38,000.00
Hardee	7,000.00	St. Lucie	92,276.91
Hernando	2,146.81	Santa Rosa	11,000.00
Highlands	4,000.00	Sarasota	59,562.00
Hillsborough	165,176.32	Suwannee	6,740.78
Indian River	196,014.20	Taylor	3,574.87
Jackson	4,100.00	Volusia	163,758.00
Jefferson	8,078.00	Volusia (Landfill)	14,300.00
Lake	60,275.00	Wakulla	9,000.00
Lee	222,246.76	Walton	4,800.00
Lee (Ft. Myers Beach)	32,868.53	Washington	5,109.98
		Total	\$2,974,228.53

SOURCE REDUCTION ACCOMPLISHMENTS

Emphasis continued to be placed on carrying out arthropod control measures that eliminate the sources of mosquito breeding and source reduction of other arthropods. In many instances, the districts and counties have found it necessary to curtail the amount of work performed, as compared with prior years, due to the continual annual decline in the amount of state aid funds made available for this type of work.

In order to perform the work listed below, the sum of \$734,300.00 was expended on labor, exclusive of overhead and supervision.

<i>Machine Ditching</i>	
No. of counties participating	30
Miles of machine ditching	529.25
Cubic yards earth excavated	3,960,300
Average labor cost per cubic yard	\$ 0.092

<i>Diking</i>	
No. of counties participating	5
Miles of dikes constructed	28.26
Cubic yards earth excavated	359,100
Average labor cost per cubic yard	\$ 0.087

<i>Hydraulic Dredging</i>	
No. of Counties participating	3
No. of 10" Dredges used	4
Cubic yards earth fill placed	906,300
Average labor cost per cubic yard	\$ 0.123
No. acres mosquito breeding area eliminated	183

<i>Cisterns, Cesspools & Wells Filled</i>	
No. of counties participating	1
No. cubic yards fill material required	2,139
No. cisterns, etc., filled	205
Average cost per cistern (labor & fill)	\$ 41.60

<i>Vertical Drainage</i>	
No. of counties participating	1
No. of holes drilled and blasted	519
Average cost per hole (labor & dynamite)	\$ 17.25
No. acres breeding area controlled	320

<i>Sanitary Landfills</i>	
No. counties & districts participating	29
No. landfill sites operated	63
Cubic yards garbage buried	2,686,000.00
Average labor cost per cubic yard	\$ 0.080

ENTOMOLOGICAL RESEARCH CENTER

MAURICE W. PROVOST, Ph.D.
Director

The work of the Entomological Research Center continued along lines already set down in the last few years. A fourth National Institute of Health research grant (to William L. Bidlingmayer) was launched during the year; this was to study methods of sampling mosquitoes in flight and carried for 3 years stipends of \$18,365, \$13,800 and \$14,350. Also at the end of the year a fifth NIH research grant was given a staff member of the Entomological Research Center; this was to Dr. A. O. Lea to study autogenicity or the ability of some mosquitoes to develop eggs without blood-feeding, carrying stipends of \$25,300 the first year and \$26,450 each of the next four years. In 1959, the four NIH grants in operation totalled \$69,865, or almost half of the state budget for this laboratory. Such federal support permits research into problems which the Research Center would not get around to for a long time, operating only on the state budget. This boost to all research projects is vital and welcome.

Scientific interchange of ideas is essential to research. Evidence that the Entomological Research Center is becoming a center for such interchange is the fact that 60 scientists visited the laboratory in 1959, representing 15 states, Washington, D. C. and 8 foreign countries. Conversely staff members addressed 4 scientific societies at national meetings and visited several out-of-state research centers, in addition to participating in several policy-making and other conferences in Washington.

ETHOLOGY SECTION

Mating, Swarming and Flight Studies

Studies of the common salt-marsh mosquito, *Aedes taeniorhynchus*, were continued with emphasis on mating, male swarming and flight behavior. These phases of behavior were studied, in the field, also in *Mansonia* mosquitoes, in the white-footed woods mosquito, *Psorophora ferox*, and in the malaria mosquito, *Anopheles quadrimaculatus*. Laboratory studies of mosquito activity by means of the actograph and of duration of the pupal stage by means of the special apparatus developed here continued throughout the year, these two being long-range studies involving several years.

Midge Studies

Several members of the Section took part in special studies of the "blind-mosquito," *Glyptotendipes paripes*, at Lake Cannon in Winter Haven. The adult habits of this pest were learned in fair detail, especially the time of night when they come out of the lakes and when they return to lay eggs. The effect of wind in the dispersal of this insect was especially investigated.

Crab-hole mosquito

A special investigation of the emergence and mating behavior of the crab-hole mosquito, *Deinocerites cancer*, revealed the fact that this peculiar mosquito, which is rarely pestiferous, is as strange in many of its habits as the famous *Opifex* mosquito of New Zealand. *Deinocerites* was easily colonized. Its further study will throw light on the behavior of many more-important species of mosquitoes because of its unique and highly evolved nature.

ECOLOGY SECTION

Salt-marsh Sand Fly

Research on the salt-marsh sand fly during the year was aimed at adult dispersal and behavior as affected by wind, temperature and moonlight. Resting habits and activity periods were also investigated. The great majority of adults were found to remain in the salt-marsh with only a small proportion moving into the hammocks along the edge. Away from the marsh, numbers decreased quickly. This strengthened the belief that these insects are usually a severe pest only in very close proximity to the marshes where they breed and that migrations away from the marshes may be rarer than once believed. An experimental truck trap sampling the air along 3 miles of beach highway averaged 59,000 females per night in a 21-night run and ran as high as 410,000 in one night, giving a good picture of their huge numbers. In most nights there were peaks of activity at dusk and dawn, the maximum catches occurring about half an hour after sunset and before sunrise. No large collections were ever made when winds were greater than 3½ miles per hour. Male sand flies appear to stay very close to the breeding areas and few were caught by truck trap.

Mosquito Sampling

Mosquito sampling studies involved long series of collections by truck trap, rotating net trap, sound trap, light trap and suction trap. The data are not yet sufficiently analyzed to present conclusions. Also under the new NIH grant a 50-foot octagonal outdoor cage was built, where it is planned to study trapping methods with known populations of various mosquito species.

Predator Studies

The fish-predation studies were continued; most of the year's work centered about analysis of fish stomach contents. Sixteen species and 3025 stomachs were examined, with special attention given 1693 stomachs of 4 important mosquito-eating fish species and 505 stomachs of 2 important feeders on the mosquito-eating fish. The study is directed at learning which fish are the heaviest feeders on mosquito larvae and what food these valuable fish turn to when larvae are no longer available on the marsh.

PHYSIOLOGY SECTION

Autogeny Studies

Autogeny in mosquitoes means the ability to mature an egg batch without a blood meal. This applies to a female's first egg batch only; later egg batches require the usual blood meal. The average autogenous *Aedes taeniorhynchus* lays her first egg batch on the fifth day of adult life, compared to females which need blood for all egg development and which lay their first egg batches on the seventh day. Since every successive day of a brood's existence means a considerable population drop by death, more autogenous (percentage-wise) females may get to lay their eggs than anautogenous ones. This, plus the freedom from having to find blood, means added insurance that the species will carry on in the face of odds.

All Florida populations examined thus far are mixed autogenous and anautogenous. The percentage varies from nearly 90 per cent autogenous females at Key Largo and Cape Sable to less than 10 per cent autogeny at Fernandina Beach. Collections sent to the Center from Puerto Rico and Trinidad have been examined and both the autogenous and anautogenous forms were found to exist in those areas.

A National Institutes of Health research grant was awarded for a comprehensive study of "Autogenicity: Causes and Consequences." The first part of this study will be a continuation of the sampling of wild populations to determine the rate of occurrence of autogeny in Florida.

A high autogenous colony of *A. taeniorhynchus* has been established for laboratory experiments. Efforts are being made to increase the autogeny in this colony. The development of an anautogenous colony has proved to be much more difficult, indicating a possible difference in mating activity or behavior.

It has been determined that withdrawal of food in the late larval stages will affect the body size of the adult and will drastically reduce the number of autogenous females which will be able to produce their first egg batch without a blood meal.

Other experiments on the biology of the two forms are underway.

Experiments have been started to study the control of reproduction by the insect's hormone system. This work is essential for determining the underlying cause of autogeny, and will be important in future behavior studies with these two forms.

Metabolism Study

This study involves the measurement of the oxygen consumption of individual mosquitoes during very short periods of time. It will provide an important clue to several problems of present interest. Originally, it was suspected that changing light conditions, which are known to stimulate the adults into their migratory flight, might in some way affect respiration (oxygen consumption). Thus, measurement of oxygen consumption appears to be a likely way of detecting the onset of the migratory phase. The microrespirometer which has been built for this respiration study can be used in investigation of a number of other physiological problems (i.e. autogeny). Although this instrument (made in our shop) is modeled after an existing type, the sensitivity of our instrument is so much greater than any other that we have had to spend many months testing, modifying and retesting it in order to be certain of its accuracy. While additional modifications and testing may prove necessary, we have one microrespirometer in operation and have now begun experiments to determine the oxygen consumption of a two-day-old unfed female mosquito. This data will serve as a standard of comparison for later experiments in which various conditions of the environment (light, temperature, food, mating) are changed in order to study their relationship to the insect's metabolism.

Artificial Mating

An artificial means of mating *A. taeniorhynchus* is necessary in certain instances because of the low rate of natural mating which occurs in the laboratory. It has been found possible to mate individual pairs of mosquitoes by decapitating the male and then bringing the male and female into contact in the proper position. Previously used for *A. aegypti*, this technique has now been perfected for *A. taeniorhynchus*. The method has several important applications in the laboratory which will facilitate future experiments, particularly in genetic studies requiring crosses between certain pairs. In addition, this work is now leading to a study of the number of fertile matings possible by a male in a certain length of time, as well as the earliest time after emergence that sperm are ready for transfer.

Fungus Parasites of Mosquitoes

Numerous species of mosquitoes have been found to be attacked by a particular species of fungus of the genus *Coelomomyces*. Prior to this report no records had been made of any mosquito in Florida being infected by this particular group of parasites.

During the year collections of mosquitoes from the field have shown that the parasitic fungus of mosquitoes is present in Florida. Two species of mosquitoes have been found commonly infected. One species of the fungus, which has been previously described and recorded in Georgia, was

found attacking the larvae and pupae of *Psorophora howardii*, the galinipper mosquito, and the adults of *Aedes taeniorhynchus*, the salt-marsh mosquito.

Another species of the fungus was found attacking larvae, pupae and adults of *Aedes taeniorhynchus*. Unlike the first species found attacking *P. howardii* and *A. taeniorhynchus*, this second species was seen infecting *A. taeniorhynchus* only. The second species is presently undescribed and consequently constitutes a new species for the particular group of fungus.

The collections of the two species of fungus here at the Research Center are the first taken in Florida in respect to both the presence of the parasites and the host mosquitoes. Future collections and observations are planned to determine the extent of the distribution of the parasite and its effect on the host mosquitoes here in Florida.

CONTROL RESEARCH SECTION

Mosquito Adulticides

The project commenced in 1958 on evaluation and study of ground equipment for dispersing chemical insecticides in the control of adult mosquitoes was continued in 1959, with emphasis on thermal-aerosol machines. These machines are better known as "fog machines" and they constitute the principal kind of ground-operating equipment used in the control of adult mosquitoes in Florida.

One make of fog machine that has been in use for several years was found to be less effective in mosquito control than other makes tested when operated in ground-wind velocities greater than 3 miles per hour. This finding should result in the saving of many dollars in public funds in the more efficient operation of this particular machine.

Two new fog machines tested in 1959 appear promising as new competitive tools in this field. Although testing of these machines is not expected to be completed before sometime in 1960, it appears certain that this research program is going to make it possible for the Florida mosquito control districts to select from a wider range of equipment having known, effective operating procedures in adult mosquito control. This should not only save in the expenditure for equipment, it also should result in better mosquito control.

Mosquito Larvicides

The project to develop effective, safe chemical insecticides for use against DDT-resistant mosquito larvae has been most encouraging. An improved granular Paris green formulation developed at this laboratory was recommended for hand application in 1958. In 1959, this product was further improved to make it useful in aerial application. Recommendations for use of this material by airplane application were made available to Florida mosquito control districts in 1959.

Many inquiries about this new mosquito control tool have come from other states, federal bureaus and certain foreign countries.

Mosquito Source-reduction Projects

A study of methods to reduce mosquito production in the vast salt-marsh area of Citrus County, Florida may be cited as an excellent example of how this type of research can save thousands of dollars in tax funds. This study, begun in 1956 and terminated in late 1958, was evaluated and reported on to the Citrus County Mosquito Control Board in 1959. In brief, the study showed that with the present distribution of population in Citrus County, salt-marsh mosquitoes in the average year constitute only a minor portion of the total mosquito annoyance in present communities. Therefore it was pointed out the expenditure of large sums on permanent mosquito control operations in these vast salt-marshes at this time would not materially reduce the mosquito problem in the principal communities of the county.

This same study did, however, result in the development of an effective method to reduce mosquito production in these and similar west-coast marshes if and when permanent control measures are indicated in these areas.

The long-range water management project being conducted in Indian River County suffered a setback late in 1959 as a result of the loss of the chief technical field assistant assigned to this project. This employee left state employment to accept a better-paying position in industry. This position, which has been vacant since November 1959, is still not filled and the prospects for filling it with a person of equal training and experience appear dim. The project is being carried on as effectively as possible by shifting part of the duties of this position to other personnel, but this situation is most unfortunate in view of the need for research information in this field of mosquito control and also because the state and county both have a sizable investment in this project.

Sand Fly Studies

It was determined in 1959 that hydraulic fills as constructed by the Indian River Mosquito Control District for mosquito control also are effective in greatly reducing sandfly production in salt marshes. These fills averaged only about 2.5 feet to 3.0 feet above mean sea level and are not considered high enough for real estate development.

In the spring of 1959, the impoundment phase of this study was transferred to St. Lucie County because of the larger populations of sand flies that occur near Ft. Pierce Inlet. Results so far indicate that diking and impounding salt-marshes might limit the production of sand flies to the water-edge areas of these impoundments, thus the chemical control of these serious coastal pests would be greatly simplified. It is expected that this phase of the project will be completed in the spring of 1960.

MISCELLANEOUS ACTIVITIES

The taxonomy laboratory performed special services of an anatomical nature this year. Changes in the genital organs of male mosquitoes

which occur after emergence of the adult and which are necessary for successful mating were studied for rate of the change as affected by temperature. We know now when, after emergence, the male is physically able to mate. Another study involved the effect of water temperature on certain body proportions in the resulting adult mosquito. And finally an anatomical study of mosquito antennae was begun since peculiarities in mating behavior demanded that we learn the role of certain sense organs located on the antennae.

The work of the insectary toward the end of the year expanded into the rearing of a considerable variety of mosquito species in order to help in certain comparative studies in ethology and physiology.

Also toward the end of the year, the Entomological Research Center initiated bi-weekly evening seminars for staff members and invited guests. These seminars are given by staff members or by visiting scientists and serve primarily to keep our men posted on one another's researches and on developments in research elsewhere.

MIDGE RESEARCH AT WINTER HAVEN

The state legislature set up a position of limnologist for this research project and in September James L. Yount, Ph.D., from the University of Florida, was employed to fill this position. Dr. Yount has prepared a research project to be presented to the NIH in March 1960. The basis of the project for a grant is to try to control "blind mosquitoes" by combination of chemical, biological and physical means.

There has been no effective larvicide found which will control the larval stage of this insect. The adult stage can be controlled by the mosquito adulticide formula 3-3-94; three gallons 90 per cent Malathion, three gallons of Lethane 384, and 94 gallons of No. 2 diesel oil.

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BUREAU OF DENTAL HEALTH

FLOYD H. DeCAMP, D.D.S.
Director

This year was highlighted by a notable increase in the amount of interest shown in dental health by civic groups and the dental profession from all parts of the state. This interest was marked by deeds — not words. The dental profession at large contributed many hours and days of volunteer service to manning dental clinics where no full time public health dentist was available. And in cooperation with schools, thousands of free dental inspections of elementary school children were made.

Paralleling this, and of equal importance, is the considerable amount of money raised by civic groups to aid in the initiation of new full time dental clinics, purchase of equipment, supplies, etc., to pay per diem for the 2 full time dentists operating the 2 mobile dental clinics operated by this bureau. Conservative estimates place the amount contributed at approximately \$25,000 in 1959.

Public support of these programs by the dental profession and by civic groups is an expression of the wider understanding of the needs of public health dentistry. It is also an expression of a determination that these needs shall be met.

FLUORIDATION

Though the benefit of fluoridation of public water supplies on the improvement of dental health is established beyond question, the application of this procedure is still the focus of public controversy. This was expressed by the introduction in the 1959 session of the Legislature of a bill to ban fluoridation of community water supplies including the termination of fluoridation in Florida cities where it is now being used. This bill challenging the right to use the most effective method for the improvement of dental health immediately brought forth the opposition to it of the dental and medical professions and of a large body of the understanding public. The bill was defeated.

The fluoridation program during 1959 changed little. One city, St. Petersburg, which formerly had fluoridation, held a referendum and the anti-fluoridationists won, and fluoridation was discontinued in December. This loss was offset by the addition of Fort Pierce (by referendum). With this addition, 20 Florida communities with a population of approximately 600,000 are receiving the benefits of fluoridation, while 25 additional cities and communities with a population of approximately 275,000 have natural fluoride of about the desired amount in their natural water supply.

PRECEPTORSHIP PROGRAM

This program was established in 1957 by the State Board of Dental Examiners and approved by the State Board of Health and State Dental

Society. Its objective was to more adequately meet the need for public health dentistry in Florida by permitting the State Board of Health to employ young recent graduate dentists for a period of one year before they took the examination for licensure. During this year of internship, each preceptor receives supervision from a locally appointed preceptorship committee of dentists, a preceptor advisor from the State Board of Health and his local health officer.

There are 10 preceptorship dentists now operating in 9 dental clinics throughout the state. Two new dental clinics were established this year, and one which had been previously closed was reopened and organized under this program. Also, 2 clinics which previously operated on a half-time basis began operating on a full time basis.

The services rendered by the 14 public health dental clinics (5 of which are operated by licensed public health dentists) include: 85,710 dental inspections of school children, 14,614 patient visits to the clinic (8197 of these were seen for the first time) and 46,649 individual treatments. The dental health educator works closely with these dentists in establishing effective dental health educational programs.

Each year the preceptors are given a one-week expense-paid post-graduate course. This year the bureau arranged for all preceptors to attend a seminar in Miami Beach, sponsored by the Florida Society of Dentistry for Children. The tuition was paid by this bureau. The Preceptorship Program is serving well in providing and expanding good public health dentistry in Florida.

SCHOLARSHIPS

In 1955 the Florida State Legislature passed a law establishing a Dental Scholarship Program. This program provides financial assistance of \$1000 a year for 4 years to any young Florida resident applicant who could not otherwise finance his dental education. (See Scholarships for Professional Education elsewhere in this Report.)

Since the program began, 49 students from 17 Florida counties have received grants amounting to over \$172,000. These students are studying in 10 different dental schools. The program was established to provide dentists for areas in the state which have few or no dentists. At the present time, 10 students have graduated under this program. The following information concerning them may be of interest: 2 are now practicing in an area of need and thereby fulfilling this scholarship agreement, 2 are in Armed Services, 2 are dental preceptors who graduated after the examination for licensure was given in 1959 and who plan to take it in 1960, one is serving an internship in Oral Surgery and 4 have repaid their loans and have refused placement in areas of need.

After 5 years only 2 dentists are serving in the areas of need and are thus fulfilling the original intent of the law. The administration of this program has been difficult since the law has not adequately set forth the conditions under which a scholarship recipient may be legally obligated

to serve in an area of need or repay his loan by money. A revision of the law will be necessary to overcome this difficulty.

MOBILE DENTAL CLINICS

This bureau operates and maintains 2 mobile dental clinics which render remedial dental service to underprivileged school children in rural areas. During the year, the following services were rendered: 5419 dental inspections, 4176 patient visits to clinic (of these 2778 were seen for the first time) and 7533 individual completed treatments. A total of 16 counties were served by the 2 clinics during 1959.

Operation of the clinics has proved to be an expensive endeavor. Their operation involves the salary and per diem expenses of 2 dentists, operating expenses of 3 automobiles, transportation of 1 clinic by a commercial mover, per diem and salary of a dental health educator used in preplanning work. A total expenditure of between fifteen and twenty thousand dollars is involved each year. Due to the expense, a change is anticipated next year, which will permit the clinics to be moved less frequently. This will provide more services for each community served, and will reduce transportation expenses, per diem expenses of operator and expenses incurred by the health educator's preplanning work.

LACTOBACILLUS SERVICE

This program was initiated by the Bureaus of Laboratories and Dental Health in 1955 as a one-year pilot program. Its success has warranted its continuation. Although the number of samples submitted (1788) during 1959 was slightly smaller than the previous year (2343) the number of dentists using the program consistently throughout the period numbers 163. With interest in the program growing steadily it can be assumed that more Florida dentists will avail themselves of this service. Florida dentists requested 805 booklets and pamphlets. This literature contained information to assist patient and dentist in carrying on the program of dietary control. It required approximately 1 hour each day for a clerical worker to record and make reports to dentists.

A questionnaire was sent to 120 dentists who were the most constant users of the project. This was done in an attempt to evaluate the combined opinion of those using the service as to whether it was of value to dentists and their patients. One hundred dentists returned the questionnaire. The replies were exceptionally favorable as to the overall worth of the program. All of the 100 thought the program was a valuable patient educational device and should be continued.

DENTAL HEALTH EDUCATION

As in each preceding year of the past 9 years, the health educator assigned to this bureau, stressed giving top priority to health education activities concerned with the elementary school child, his parent and teacher. There is a vital need to convince parents of the importance of

dental health to their children's future well-being. To assist in this endeavor an appreciable number of local dentists gave of their time to meet with Parent-Teacher Association groups.

Dental instruction in teacher training schools is a glaring need if the teachers are to have adequate preparation to be able to teach scientifically sound dental health facts. Continued effort was made by the health educator to meet each health education class each semester in the major Florida white and Negro universities and colleges to help develop an awareness and interest in dental health in the future teachers.

Some 68,500 pieces of printed materials, 40,000 pieces of mimeographed materials, 110 teacher's dental health packets and 60 community fluoridation packets were distributed during the year. This large quantity of material went chiefly to educational institutions in the state seeking to emphasize scientific dental health knowledge and practice. Many new films and other audio-visual aids on dental health were previewed and a substantial number purchased by the State Board of Health on recommendation of this bureau. To make the best use of television opportunities, the bureau augmented its props such as models, charts, graphs and slides, and a variety of dental health films were cleared for use on television. Ever alert to the needs of the private family dentist in his role of educator, the bureau produced or purchased materials they requested.

One successful fluoridation referendum resulted from cooperation of civic groups, and effective educational methods by the local dentists assisted by this bureau. The Junior Chamber of Commerce in Fort Pierce sponsored the fluoridation referendum.

As a follow-up on the five-year dental care program of the U. S. Public Health Service in Gainesville, which was completed in June 1959, a county dental clinic was established using a preceptor dentist and the first step of follow-up education was executed through work with the parents.

Many counties were reached with a program of dental health education through preplanning for the white and Negro mobile dental clinics. The mobile units provide corrections for only underprivileged children but the health education program is directed to reach the entire elementary school population. It includes teachers' meetings, assembly talks, work in the individual classrooms when requested, meetings with the nurses that work in the schools and often with lunchroom workers as well as Parent-Teacher Association meetings.

The health educator participated as State Board of Health leader for the first Negro Teachers Project in Florida. In working with the group at Bethune-Cookman College, she observed the marked interest of the group in the dental health program of Negro children.

The cooperative program of the Agricultural Extension Service, State Board of Health and State Dental Society, aimed at establishing dental health programs for 55,000 4-H Club members and their leaders, moved forward. Again this year, the bureau participated in 4-H Short Courses

at Florida State University and Florida Agricultural and Mechanical University and the Negro mobile dental unit was placed in a 4-H summer camp. Reports were received from Agricultural Extension Service personnel that an increasing number of their club members and their families were seeking and securing dental corrections.

Organized programs of health education and dental corrections are becoming more commonplace in the average Florida community. More and more dental clinics financed by local groups are being able to expand from solely emergency extraction programs to routine preventive care programs.

PILOT SCHOOL PROGRAM

The pilot school program, which was originated in Sunset School in Miami in 1955, has been expanded. The project was very successful during the first year. Complete dental examinations were given to all school children enrolled. At that first examination, approximately 25 per cent of the children were receiving dental care at the office of private dentists. Due to the active interest of parents and teachers and also the dentists from the Miami Dental Society, who participated in the program, a much better dental health educational program was instituted. In 1959, after almost 5 years in this program, approximately 85 per cent of the children were having dental care at the office of private dentists and 82 per cent of the children needed no dental care at the time of the annual dental examinations.

Because of the success of this program, 5 additional pilot schools have been established in Miami; 2 pilot schools are operating in Broward County; 4 are operating in Volusia County; 1 in Duval County and 1 at the University Demonstration School in Tallahassee.

DENTAL HEALTH WORKSHOP

The Fourth Annual Dental Health Workshop was held in October. It was attended by 50 dentists from all parts of the state and was the largest and most successful one held so far. It was a joint program participated in by the Florida State Dental Society and this bureau. The meeting was exceptionally interesting and the group present voted to have a similar workshop in 1960.

POLK COUNTY DENTAL SURVEY

Because of his growing concern as to whether or not excessive fluorides were affecting human health in Polk County, the State Health Officer in February directed this bureau to formulate plans for a dental survey in that county. The survey was supported by the director of Polk County Health Department, Polk County Citizens Air Pollution Committee and local citizens.

It was decided that a dental survey should be one of the first steps preliminary to the initiation of the overall air pollution medical study. By

the dental examination, it could be determined if the teeth of individuals who live within a prescribed area of pollution were excessively mottled when compared to those of a control group outside the polluted area — both having similar environmental conditions other than the factor of pollution.

The Chief of the Epidemiology and Biometry Branch of the National Institute of Dental Research and the Assistant Dental Consultant, Region IV, USPHS, served as consultant to this bureau and assisted with the examinations.

A total of 2384 elementary school children were examined in 4 separate areas. Of these, 1069 were permanent residents and 1315 were non-permanent residents.

After evaluation of the data obtained and a study of local water supplies and other factors, the report shows that there is no evidence that fluorides in this area are affecting in any way the dental conditions of any of the children who were included in this study.

BUREAU OF FINANCE AND ACCOUNTS

FRED B. RAGLAND, B.S.
Director

PAUL R. TIDWELL, B.B.A.
Assistant Director

The business management of the agency is the responsibility of this bureau, which makes every effort to be of maximum assistance to the State Health Officer and the directors of various public health programs and activities in planning and executing the overall financial program. The bureau has the responsibility of keeping the State Health Officer and members of the Board currently advised as to program expenditures in relation to budgeted funds.

The fiscal year ended June 30, 1959 was the second year of the 1957-59 biennium for which the 1957 Legislature made available to the agency state funds through the General Appropriations Act. In planning the financial program for the fiscal year, agencies were cautioned by the State Budget Commission to conserve funds wherever possible. Unexpended funds from the first year of the biennium were not made available for use in the second year. All appropriations were reduced by 5 per cent and held in reserve. Throughout fiscal year 1959 the State Budget Commission was faced with actual revenue less than forecast, resulting in insufficient cash balance at times to carry out the state's business at the level upon which appropriations were made. As late as the middle of May 1959 all agencies were directed by the State Budget Commission to further set aside monies in reserve in an amount of 5 per cent of the fourth quarter appropriation release. This was sorely felt by this agency and resulted in a considerable amount of obligations being held until the beginning of the new fiscal year, July 1, 1959. This was most acutely felt in our Hospital Services for the Indigent Program.

The 1959 session of the legislature appropriated funds for the 1959-61 biennium based upon maintaining the status quo of all programs. Generally speaking, no additional funds were appropriated for the State Board of Health. The only exception was a small amount for cancer control to provide for a medical director and minimum additional clerical assistance for tumor clinics. For the Mental Health Program a small additional amount was provided for 5 new positions.

One notable action of the 1959 Legislature had to do with our Hospital Services for the Indigent. Whereas in the past there had been a state appropriation of approximately \$2,000,000 for each year to match county funds, this appropriation was reduced to \$1,000,000 for each of the next 2 years. But in addition, the legislature appropriated \$625,000 for each of the next 2 years to match federal funds that would be available to Florida for hospital services to public assistance recipients. It is estimated that the \$625,000 state funds will earn approximately \$1,100,000 federal funds. In terms of the combined total of all of these funds, there would be slightly over 5 million dollars each year from state, local and federal

sources. This approach to the overall responsibility has caused a good many changes in administration of the program to be put into effect and has brought about close cooperation between the State Board of Health and the State Department of Public Welfare in that part of the program for hospital services to public assistance recipients.

Comparing program expenditures for fiscal year 1959 with the previous fiscal year, it is noted that the expenditure pattern was fairly consistent. Overall, approximately fourteen and three-quarter million dollars was spent. In two instances there was notable increase. The Hospital Service for the Indigent Program increased about one-half million dollars to a little over two million dollars for 1959 and the County Health Departments increased over three quarters of a million dollars to six and three-quarters million for 1959.

During the year the department was fortunate in being able to replace 2 old accounting machines that were completely worn out and had been in use for 20 years. The new machine is a NCR accounting machine with punch card coupler. The versatility of the new equipment will give better organized reporting and considerably quicker information than in the past. This cannot help but be of great advantage to the agency as a whole.

Early in the year considerable study was given to the assignment and use of state automobiles resulting in reassignment of a number of them. At the close of the fiscal year June 30, 1959, the number of state automobiles owned was 77. These were driven approximately 1,250,000 miles during the year in carrying out travel responsibilities. In addition, the agency owned 38 trucks or special purpose vehicles; such as, mobile Tuberculosis, Dental and Engineering laboratories. These units traveled approximately 250,000 miles during the year. Assignment and use of all vehicles is continuously reviewed to insure they can be put to the most efficient and economical use in carrying out the agency's travel responsibilities.

In July 1959 an assistant director of the bureau was added to the staff and this will enable the bureau to more effectively serve its mission.

PURCHASING AND PROPERTY

During calendar year 1959, the various bureaus and divisions of the agency submitted to the office of the Purchasing Agent approximately 2500 purchase requisitions for equipment, supplies and service. In procuring these items 3200 purchase orders were issued to various vendors and suppliers, totaling a little over \$1,050,000. This marks the fourth consecutive year in which purchase orders issued exceeded \$1,000,000. Purchases in County Health Departments are accomplished normally by each County Health Department. However, the office of the Purchasing Agent at the State Board of Health always stands ready to advise and assist County Health Departments with their purchasing needs.

This office coordinates and cooperates with the State Purchasing Commission and other state agencies in the exchange of information which may result in better utilization of state funds. For example, certain drugs

used by this agency are procured under a contract negotiated by the State Tuberculosis Board. That board in turn procures its insulin requirements under the State Board of Health's contract. Annual bids on biologicals, drugs, insulin and X ray film are so worded to permit any agency of state, county or city government to purchase under our contract if desired.

Insurance

Fire insurance on buildings and contents is carried in the State Fire Insurance fund under the supervision of the State Fire Insurance Commissioner. Coverage on boilers and heating equipment is carried in a master policy supervised in the office of the State Fire Insurance Commissioner. This agency protects scientific equipment in various mobile laboratories by a "floater" or transportation policy. Automobiles, trucks and other special purpose motor vehicles owned by the State Board of Health are covered by a fleet policy to include public liability, property damage, fire, theft and comprehensive. The agency acts as self-insurer for collision damage.

During 1959, losses were minor. A 1946 Spartan trailer was completely destroyed by fire and the fair market value of \$750.00 was paid by the insurer. In May 1959 there was water damage resulting from heavy "flash" rains and the agency was compensated in the amount of \$1200 for damages. Small claims under the automobile comprehensive coverage of approximately \$125.00 was paid to the agency. Damages to state-owned automobiles and motor vehicles due to collision amounted to slightly over \$600.00. Since the agency acts as self-insurer, this amount was paid out of the operating funds of the agency, but even so the amount was considerably less than insurance coverage would have cost.

Property Control

In recent years there has been a keener interest on the part of the legislature, the State Auditing Department and the state agencies with regard to property control accountability. Several years ago, we devised an IBM punch card procedure for recording property items procured. The procedure is considered quite adequate; however, we did experience difficulty during the year in following completely the system set-up. This was due primarily to lack of personnel; in fact, the property clerk was absent on extended sick leave for over half of the year. Toward the end of the year, plans were made to adequately staff the property section and re-establish accountability. This will be one of the main areas of emphasis during 1960.

BUILDING AND GROUNDS

The State Board of Health is extremely proud of the central office plant consisting of various buildings, the newest being the Porter Building to house administrative offices. There is now approximately 85,000 square feet of space at the central office location. During the year there was some change in the buildings and grounds maintenance staff. An evaluation of

duties and responsibilities of this section was made by our new Buildings and Grounds Superintendent during the summer months and a number of steps have been taken to improve the care and upkeep of all buildings and grounds. Particular emphasis is being placed upon the very important and expensive mechanical part of the plant including boilers, compressors, air handling units, cooling towers, etc.

A security force directly responsible to the Superintendent of Buildings and Grounds is on duty at all times except regular office hours. Persons assigned to the security force are responsible for routine check of all mechanical equipment, entrances, vehicles left on the parking lot and general protection of all property and equipment.

Our maintenance staff is qualified to take care of a considerable amount of the general maintenance needs of the agency. During the year, 750 written work orders were processed through the Superintendent of Buildings and Grounds, most of which were completed.

The most pressing emergency which faced this staff during the year was the flash flood on May 19, 1959. Certain parts of the basement area of the Julia Street building and the Pearl Street building were flooded. Actual equipment damage was slight; however, there was considerable inconvenience and many man-hours needed to clean up and paint up after the high waters. In December 1959 a boiler back-fire occurred. This was very carefully investigated by our own maintenance staff as well as experts from the Hartford Insurance Company. Damage was little and evaluation of our maintenance and operation procedures revealed no negligence. As a result; however, all boilers were carefully inspected and checked.

During the early part of 1960, emphasis will be placed upon property improvements and mechanical reliability. There is an urgent need for considerable roof work to be done on the Julia Street Building and this will be undertaken.

There has been a long recognized need to acquire additional property for future needs and expansion. This need was placed before the 1957 legislature and a special act was passed to allow the agency to acquire one or two small parcels in the adjoining block #114. In December 1959 two small parcels in this block were purchased, one in the amount of \$12,000 and the other for \$7,000.00. In the immediate months ahead, every effort will be made to acquire additional parcels within this block.

Shipping and Receiving

This section is directly responsible to Superintendent of Buildings and Grounds and the bulk of shipping includes drugs, supplies and forms to County Health Departments, containers and laboratory supplies to regional laboratories and State Tuberculosis hospitals. This section receives all incoming shipments and completes receiving reports for such shipments. The section also aids our central laboratory in the preparation of laboratory mailing containers.

DUPLICATING

The Duplicating Department was moved into larger quarters in the basement area of the Julia Street Building in the spring of 1959. The space assigned is well suited for this work since there is sufficient lighting, heating and air-conditioning and adequate electrical wiring service for specialized equipment. Shortly after occupying the space; however, high waters from the flash flood of May 19 did cause considerable inconvenience. Thirty-one inches of water flooded the area. Prompt action on the part of assigned personnel quickly restored all of the equipment to useful service. At that time addressograph equipment and approximately 25,000 addressograph frames were located in the space occupied by the Duplicating Department. All of the frames rusted very quickly and it was necessary to replace them. Our own employees transferred the plates from the old to the new frames.

During the year each job requested of the department was by separate written requisition. There were 2179 requisitions for mimeograph, multilith or multigraph services. These jobs required 5879 separate forms and when reproduced, the total impressions were 8,840,000.

During the year it was found desirable to set aside a room on the second floor of the Porter Building designated as the Ditto Room. Here is located all of the addressograph equipment, including graphotype and approximately 28,000 addressograph plates. Other equipment includes a Robotyper, a ditto machine and multiple copy machine. One person is assigned to duty in this location and has responsibility for routine maintenance of the equipment. She also assists all departments who have need for the services of this ditto room.

FISCAL SECTION

The financial transactions of the State Board of Health for the fiscal year ended June 30, 1959 as reflected by the records of the bureau are presented in a condensed form in Tables 59, 60, and 61 and in Figure 11.

A detailed financial report for the fiscal year ended June 30, 1959, has been prepared and distributed to the Governor, members of the State Board of Health, and all bureaus, divisions and County Health Departments.

The funds received (or appropriated) for the fiscal year ended June 30, 1959, were from the following sources:

State Appropriations and Funds	\$ 8,854,175.96	58%
From Local Agencies for County Health Departments	4,622,451.49	31%
From Federal Grants-in-Aid	1,208,450.39	8%
From Research Grants	252,553.03	2%
From State and Local Sources for Construction	50,533.37	—
From Local Agencies for Hospital Services for the Indigent*	202,269.85	1%
TOTAL	\$15,190,434.09	100%

* These funds deposited with and disbursed through the State Treasury. Does not include \$1,962,300 disbursed locally.

The operating and capital expenditures by the State Board of Health were for:

Personal Services (Salaries and Professional Fees)	\$ 8,003,806.29	54%
Contractual Services (Repairs, Utilities, Travel Expense, Hospital Program)	3,530,993.89	24%
Materials and Supplies (Office, Medical, Laboratory, Mosquito Control, Educational)	977,074.58	7%
Current Charges (Rents, Insurance, Merit System Costs, Registrar Fees)	201,118.13	2%
Capital Outlays (Equipment and Fixed Assets)	507,160.60	3%
Grants to Counties and Mosquito Control Districts	1,327,940.62	9%
Miscellaneous (Education Aids and Subsidies)	168,482.40	1%
TOTAL	\$14,716,576.51	100%

In addition to funds reported in the annual financial report and summarized above, certain other funds and services were made available by the Public Health Service of the U. S. Department of Health, Education and Welfare to the activities of the Board but were not paid directly to the State Board of Health. They include:

Value of Public Health Service personnel on loan to the Board in Preventable Diseases Programs\$145,183.64
Fiscal operation followed a budget plan of 138 departmental budgets. These budgets were occasionally revised to meet changing situations.

TABLE 59

SUMMARY OF RECEIPTS AND DISBURSEMENTS AND BALANCES FOR THE FISCAL YEAR ENDED JUNE 30, 1959

RECEIPTS

FROM STATE FUNDS

From State Appropriations-Operations:	
General Public Health	\$ 1,990,862.00
Mental Health	501,325.00
Cancer Control	22,000.00
Consolidated Mosquito Control	2,102,756.00
County Health Units	1,750,000.00
Medical Students Scholarships	40,000.00
Dental Students Scholarships	40,000.00
Hospital Service for Indigents	2,000,000.00
Mental Health Council	181,700.00
Purchase of Salk Vaccine	125,000.00

TABLE 59 (Continued)

Other:	
Medical Laboratory Control	935.00
Bedding Inspection Administration	84,757.96
Advisory Hospital Council	1,090.00
Drug Store Inspection	13,750.00
TOTAL STATE FUNDS	\$ 8,854,175.96

FROM FEDERAL GRANT-IN-AID

Public Health Service:	
General Health	\$ 361,552.00
Venereal Disease	77,495.00
Tuberculosis Control	84,579.00
Heart Disease	43,816.29
Cancer Control	47,448.00
Mental Health	83,493.65
Water Pollution	59,036.00
Children's Bureau:	
Maternal and Child Health	451,030.45
TOTAL FEDERAL GRANT-IN-AID	\$ 1,208,450.39

FROM OTHER CONTRIBUTIONS AND SOURCES

Grants and Donations	\$ 252,553.03
Dade County District Laboratory and Health Center Trust Fund	16,277.69
Orange County District Laboratory and Health Center Trust Fund	34,250.00
Improvements—Air Conditioning—Jacksonville	5.68
TOTAL OTHER CONTRIBUTIONS AND SOURCES	\$ 303,086.40

FROM LOCAL AGENCIES FOR COUNTY

HEALTH UNITS	\$ 4,622,451.49
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FROM LOCAL AGENCIES FOR HOSPITAL SERVICE FOR THE INDIGENT

TOTAL RECEIPTS	\$15,190,434.09
Balance July 1, 1958 \$3,811,728.12 (Less expired appropriations of \$12,873.68)	3,798,854.44
TOTAL RECEIPTS AND BALANCES	\$18,989,288.53

DISBURSEMENTS

OPERATING EXPENSES

Personal Services:	
Salaries	\$ 7,902,186.75
Professional Fees and Consultant Services	101,619.54
Contractual Services:	
Travel Expense, including subsistence and lodging	974,681.41
Communication and Transportation of Things	215,258.05
Utilities	91,081.65
Repairs and Maintenance	72,981.42
General Printing and Reproduction Services	45,386.08
Hospital Care of Indigent	2,017,223.29
Other Contractual Services	114,381.99

TABLE 59 (Continued)

Materials and Supplies:	
Bedding, Clothing and Other Textile Products	643.66
Building and Construction Materials and Supplies	14,622.57
Coal, Fuel Oil and Other Heating Supplies	13,341.23
Educational, Medical, Scientific Materials and Supplies	709,432.13
Maintenance Materials and Supplies (Janitorial, etc.)	51,483.90
Motor Fuels and Lubricants	43,156.57
Office Materials and Supplies	138,115.69
Other Materials and Supplies	6,278.83
Current Charges:	
Insurance and Surety Bonds	25,672.35
Rental of Buildings and Equipment	101,326.97
Other Current Charges and Obligations	47,986.81
Merit System	26,132.00
TOTAL OPERATING EXPENSES	\$12,712,992.89

CAPITAL EXPENSES

Books	\$ 4,212.20
Buildings and Fixed Equipment	269,640.65
Educational, Medical, Scientific and Agricultural Equipment	92,605.80
Motor Vehicles-Passenger	21,325.37
Motor Vehicles-Other	240.00
Office Furniture and Equipment	119,132.96
Other Structures and Improvements	3.62
TOTAL CAPITAL EXPENSES	\$ 507,160.60

GRANTS, SUBSIDIES AND CONTRIBUTIONS

Grants to Counties and Mosquito Control Districts	\$ 1,327,940.62
Other Educational Aids and Subsidies	168,482.40
TOTAL GRANTS, SUBSIDIES AND CONTRIBUTIONS	\$ 1,496,423.02
TOTAL PROGRAM EXPENSES	\$ 14,716,576.51

NON-OPERATING DISBURSEMENTS

Comptroller's 3% Fee Collection	\$ 2,981.39
Transfers	74,868.89
Refunds	155,773.33
TOTAL NON-OPERATING DISBURSEMENTS	\$ 233,623.61
TOTAL DISBURSEMENTS	\$14,950,200.12
BALANCE JUNE 30, 1959	4,039,088.41
TOTAL DISBURSEMENTS AND BALANCE	\$18,989,288.53

TABLE 60
SCHEDULE OF EXPENSES
BY PUBLIC HEALTH PROGRAM ACTIVITY

Health Services to mothers, infants, preschool and school children....	\$ 2,733,790.00
Statewide Venereal Disease Control, Diagnosis and Referral of Infectious Venereal Disease Patients to Treatment Clinics—also Operation of Program	881,000.00
Mosquito and Pest Control Programs, including Pest Control Law Enforcement	2,658,386.67
Indigent Hospitalization	2,049,411.40
Statewide Sanitary Engineering and Environment Sanitation	1,389,836.49
Statewide Tuberculosis Control, X ray Survey and Follow-up Work ..	1,059,100.00
Statewide Cancer Control Program	402,500.00
Mental Health Program	984,600.00
Statewide Narcotic, Drug, Medical Practice Law Enforcement	130,096.50
Industrial Hygiene Program (including Air Pollution)	87,233.05
Heart Disease Program	249,500.00
Building Construction	259,912.53
Polio Program	141,241.76
Other Health Programs and Administration	1,689,968.11
Total Expenses	\$14,716,576.51

SCHEDULE OF EXPENSES BY FUNCTIONAL ACTIVITY

General Public Health (to include general operating expenses and Miscellaneous Activities)	\$ 841,050.53
Vital Statistics	271,701.86
Health Information	89,874.59
Sanitary Engineering	377,087.94
Entomology and Mosquito Control	1,983,220.93
Laboratories	554,438.47
Tuberculosis Control	186,231.63
Preventable Diseases (Excluding Tuberculosis)	251,772.94
Narcotics	102,374.58
Chronic Diseases	107,476.62
Mental Health	264,859.46
Maternal and Child Health	284,945.71
Hospital Services for the Indigent	2,049,411.40
Local Health Service	240,563.27
Polio Program	99,996.65
Building Construction	259,912.53
County Health Units	6,751,657.40
Total Expenses	\$14,716,576.51

**SUMMARY OF TOTAL EXPENSES BY MAJOR FUNCTIONAL
LEVEL**

State Level — Organizational Units	
State Funds	\$2,383,349.95
Federal Funds	769,937.85
Research Grants	93,793.99
	\$ 3,247,081.79

TABLE 60 (Continued)

State Level — Special Services		
State Funds	.....	\$4,345,969.20
Federal Funds	.....	214,915.53
Research Grants	.....	156,952.59
		<hr/>
		\$ 4,717,837.32
*County Health Units		
State Funds	.....	\$1,972,061.55
Local Funds	.....	4,573,115.55
Federal Funds	.....	206,480.30
		<hr/>
		\$ 6,751,657.40
GRAND TOTAL		<hr/>
		\$14,716,576.51

* Total county health units expenditures \$6,751,657.40 represents per capita expenditures of \$1.59 (52 cents state and federal funds and \$1.07 local funds) based on population served by county health units of 4,531,200 (1959 Est. Census). For comparison with previous year see 1958 Annual Report, Table 51, page 231; 1957 Annual Report, Table 52, page 235; 1956 Annual Report, Table 54, page 226; 1955 Annual Report, Table 3, page 18; 1954 Annual Report, Table 3, page 16.

TABLE 61
FUNDS RECEIVED BY COUNTY HEALTH UNITS FROM STATE BOARD OF HEALTH AND
LOCAL SOURCES FOR THE FISCAL YEAR ENDED JUNE 30, 1959

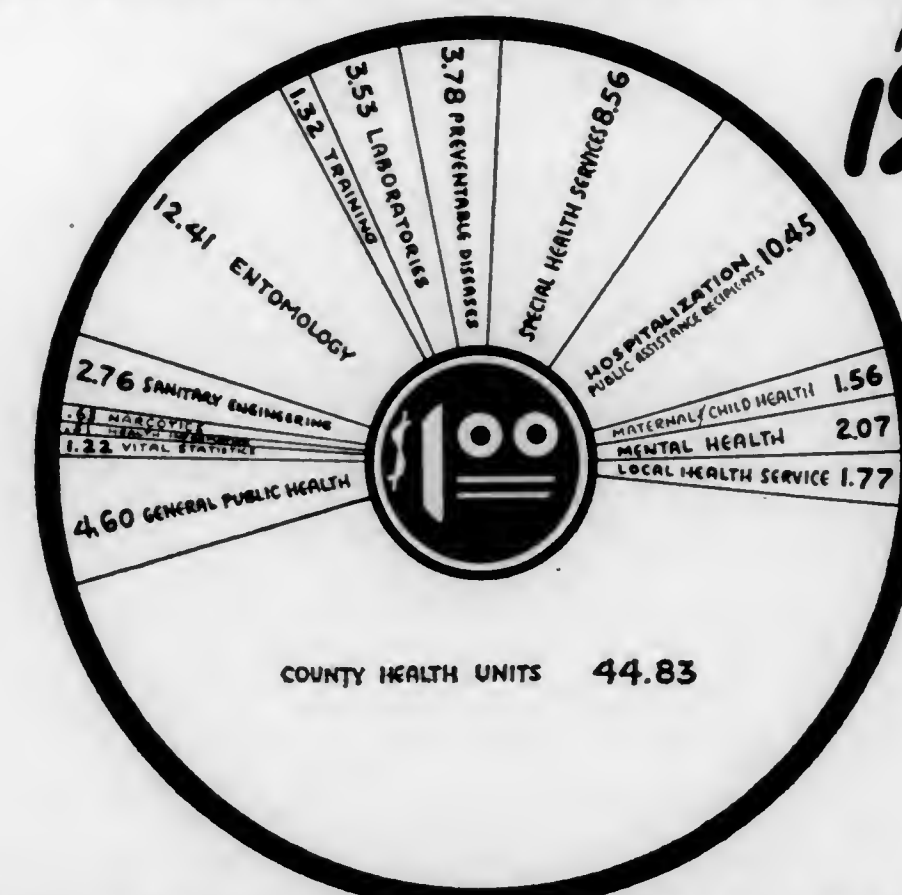
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TABLE 61 (Continued)
FUNDS RECEIVED BY COUNTY HEALTH UNITS FROM STATE BOARD OF HEALTH AND
LOCAL SOURCES FOR THE FISCAL YEAR ENDED JUNE 30, 1959

STATE BOARD OF HEALTH										LOCAL FUNDS		
Total Funds	Total	State	State Mental Health	Federal	Total	Board of County Commissioners	Board of Public Instruction	Cities	Fees and Miscellaneous			
\$ 18,181	\$ 10,084	\$ 10,084	\$	\$	\$ 8,097	\$ 4,800	\$ 3,200	\$	\$ 97			
Jefferson.....	5,251	5,251			3,014	2,000	1,007		7			
Lafayette.....	8,265	6,251			54,738	52,291		1,980	467			
Lake.....	92,922	38,184			31,320	30,861		5,000	459			
Lee.....	56,813	25,493			80,861	61,021	9,390		5,450			
Leon.....	150,865	70,004	25,176	3,420	13,669	8,004	4,500		1,165			
Levy.....	126,548	12,879			6,912	4,355	2,500		7			
Liberty.....	12,321	5,409			11,610	8,000	3,500		110			
Madison.....	27,044	15,434			9,049	49,654		5,600	1,915			
Manatee.....	95,480	31,907	9,049	2,955	57,569	27,647	4,000		439			
Marion.....	69,613	31,927	3,200		37,666	14,733	500		125			
Martin.....	23,067	13,709			15,358	33,041	5,500	5,650	3,558			
Monroe.....	78,989	31,240	3,330		47,749	21,141			199			
Nassau.....	41,185	19,845			21,141	22,225			816			
Nesades.....	50,311	22,698			27,613	22,225	4,572		46			
Okealoosa.....	6,302	6,302			6,100	6,054			46			
Okeechobee.....	12,402	47,448	17,758	10,230	192,543	131,576	16,638	870	48,549			
Orange.....	267,979	75,436			10,505	7,695	2,600		210			
Osceola.....	24,091	13,586			239,656	136,775	27,415	39,390	36,076			
Palm Beach.....	335,006	66,806	24,036	4,508	4,935		4,180		755			
Pasco.....	21,019	16,084			474,312	363,783		5,100	110,529			
Pinellas.....	96,491	79,742	30,505	4,020	235,077	195,026	28,125		6,826			
Polk.....	588,579	27,812	2,812	2,482	24,583	24,184		4,500	5,471			
Putnam.....	331,568	66,197	1,850		25,600	15,629	8,400		178			
St. Lucie.....	50,734	24,361	8,622		22,371	13,793	4,000		19,698			
St. Lucie.....	57,853	23,631			103,373	79,675	4,000		991			
Santa Rosa.....	48,590	21,219	11,960	5,570	22,291	14,600	6,700		478			
Sarasota.....	158,466	37,568	3,680		7,917	3,689	3,750		104			
Seminole.....	49,483	23,512			14,537	14,122	500		415			
Sumner.....	19,094	11,177			5,531	8,750			31			
Suwannee.....	30,281	15,744			3,531	5,500			104			
Taylor.....	22,319	12,965			172,173	124,889	15,300		31			
Union.....	9,229	9,229			5,028	5,000			28			
Volusia.....	81,659	48,236	30,618	2,805	14,038	6,120	6,000	1,795	123			
Wakulla.....	6,915				11,354				179			
Walton.....	30,787	16,749										
Washington.....	22,204	10,850										
TOTALS.....	\$6,762,033	\$2,244,849	\$1,660,000	\$378,368	\$206,481	\$4,517,184	\$3,571,585	\$243,612	\$154,762			
									\$547,225			

FIGURE 11

THE PROPOSED BUDGET FOR FLORIDA
STATE BOARD OF HEALTH DOLLAR
FOR 1960



GENERAL PUBLIC HEALTH	\$763,580	4.60
VITAL STATISTICS	200,152	1.22
HEALTH INFORMATION	84,372	.51
NARCOTICS	105,280	.63
SANITARY ENGINEERING	459,068	2.76
ENTOMOLOGY	2,060,472	12.41
TRAINING	219,500	1.32
LABORATORIES	585,205	3.53
PREVENTABLE DISEASES	628,119	3.78
SPECIAL HEALTH SERVICES	1,421,139	8.56
HOSPITALIZATION-PUBLIC ASSISTANCE RECIPIENTS	1,735,000	10.45
MATERNAL AND CHILD HEALTH	259,160	1.56
MENTAL HEALTH	342,868	2.07
LOCAL HEALTH SERVICE	294,455	1.77
COUNTY HEALTH UNITS	7,441,051	44.83

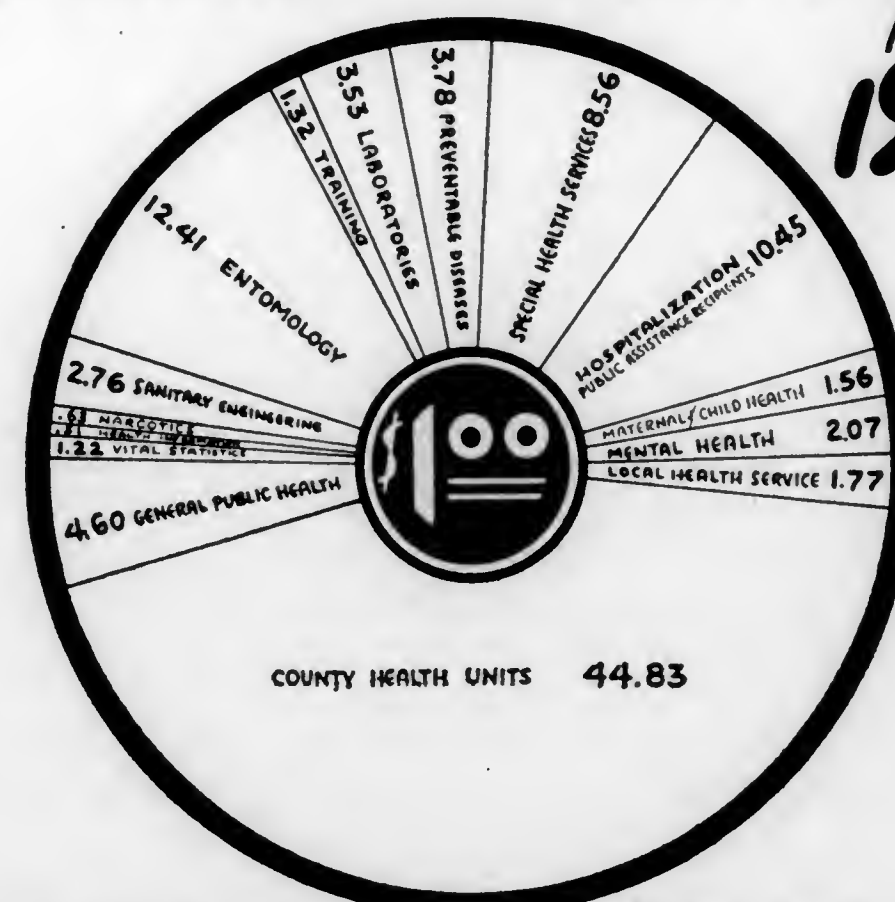
TOTAL \$16,599,421 ONE DOLLAR

TABLE 61 (Continued)
FUNDS RECEIVED BY COUNTY HEALTH UNITS FROM STATE BOARD OF HEALTH AND
LOCAL SOURCES FOR THE FISCAL YEAR ENDED JUNE 30, 1959

STATE BOARD OF HEALTH										LOCAL FUNDS		
Total Funds	Total		State	State Mental Health	Federal	Total	Board of County Commissioners	Board of Public Instruction	Cities	Fees and Miscellaneous		
	\$	10,084	\$	10,084	\$		\$	4,800	\$	\$	\$	
Jefferson.....	\$ 18,181	\$ 10,084	\$ 10,084			\$ 8,097	\$ 4,800	\$ 3,200		\$ 97		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
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Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
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Lafayette.....	8,265	5,251	5,251			3,014	2,000	1,007		7		
Lafayette.....	8,265	5,251	5,251			3,014	2,000					

FIGURE 11

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STATE BOARD OF HEALTH DOLLAR
FOR 1960



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